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FORMULATING A PLAN FOR ECONOMIC DIVERSIFICATION IN DEFENSE
DEPENDENT COMMUNITIES: ESTABLISHING A MODEL FOR STABILITY,
GROWTH AND DEVELOPMENT

By

TIMOTHY L. MILLNER

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A PROJECT PRESENTED TO THE GRADUATE SCHOOL OF THE UNIVERSITY
OF FLORIDA IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE
DEGREE OF MASTER OF ARTS IN URBAN AND REGIONAL PLANNING

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Abstract of Project Presented to the Graduate School of the University of Florida in
Partial Fulfillment of the Requirements for the Degree of Master of Arts in Urban and
Regional Planning

FORMULATING A PLAN FOR ECONOMIC DIVERSIFICATION IN DEFENSE
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By

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This project studies economic dependency on defense spending in certain communities and formulates methods to help those localities diversify their economies. The project asks whether such communities should pursue a more varied economy and whether federal assistance should be made available to help with the effort. The focus is on creating an economic development process that will allow dependent areas to spur growth in other economic sectors, thereby broadening their respective economic bases. The process is applicable to locations near military bases and to those areas near large defense contractors. By their reliance on military spending, communities are vulnerable to the cyclical nature of defense spending. The programs that have been used in the past to assist communities have offered assistance after spending reductions had already occurred. This report proposes a proactive planning approach to mitigate the communities of their reliance on Pentagon spending by giving the localities help in broadening their economic base as a matter of course, before cuts occur, as part of the communities' overall development planning. The idea behind the concept is that spending on defense is not an equitable or sustainable way to invest in the fiscal well-being of the country. Investments in communities tend to provide many more positive benefits to the local, state and

national economies. By investing some defense funds to strengthen some communities, all concerned would be better off.

Chapter 1

INTRODUCTION

During past rounds of base closures, several communities affected by the loss of a military base and its economic support found it very difficult to recover economically, or to find new businesses or industries to replace the lost revenue. These resulted in a detrimental impact on several communities, both economically and socially, as those communities were not prepared to deal with the sudden loss of jobs. Even with the events of September 11th and the subsequent military response, more bases will be closed or downsized in the future and defense spending in many areas with military bases will decrease. Even among bases that remain open and busy otherwise, funds for specific programs or projects are likely to become less available.

This research will investigate what actions some communities largely dependent upon defense spending can take to eliminate the negative impacts of decreased expenditures *before* the cuts are actually implemented. The research determines whether communities adjacent to military bases can and should diversify their economies and explores some methods that can be used to accomplish diversification. The goal is to devise processes to stimulate economic development while decreasing dependency on defense dollars in these geographic areas. The resulting economic plans will address diversification of existing enterprises that serve the military bases primarily, as well as to encourage the establishment of new non-defense related enterprises. The focus is on development of a process and the application of that process to a chosen community. Looking beyond mere short-term job creation and towards long lasting structural changes, a partnership between the government and the local community would be formed that

would establish a framework for economic development and decreased dependency on federal defense spending. Utilizing modified guidelines for the Department of Defense Office of Economic Adjustment, the economic plans would allow communities to take advantage of their close proximity to a military base for the purpose of formulating and implementing a policy for progressive economic change. This research is also intended to provide a theoretical planning model that can be used by decision makers in determining methods to stimulate economic diversity in these communities, thereby producing economic growth and stability. The goal is to create or promote communities that are much more immune from the ebb and flow of defense spending by establishing a broader based economy.

Diversification and conversion are two of the means by which defense related enterprises change their production from the generation of end products intended strictly for consumption by defense organizations, to also producing for civilian sectors. This paper focuses on diversification, which is an effort to lessen the stress of economic transition by reducing the entity's dependence on defense dollars. While conversion is an effort to change a defense company's product line from being primarily military oriented to being more civilian oriented, diversification encourages different (non-military related) products and different (non-military related) enterprises. As it relates to military spending, diversification has tended to refer more to the activities undertaken by a large defense oriented corporation. In that sense diversification essentially means producing at least two product lines – one for military defense customers and one for the civilian sector. In the sense that it will be used in this paper, diversification means communities dependent upon government defense dollars establishing strengths in other economic sectors.

While the impetus will rest with the respective communities to initiate and implement actions towards diversification, this paper will also show why the federal government should become involved and how it can provide assistance to these communities. As we will see, the Department of Defense Office of Economic Adjustment can play a role in the diversification

process. The Office of Economic Adjustment (OEA) is the primary office within the Department of Defense with responsibility for providing adjustment assistance to communities, regions, and States that have been adversely affected by major Defense program changes. Such adverse affects might come about as a result of base expansions, closures or realignments, major contract changes that result in significant worker layoffs, and other personnel reductions and increases (OEA, 2002).

Economic adjustment assistance provided by the OEA includes an assessment of the problem, identifying and evaluating alternative courses of action to solve the problem, identifying resource requirements and possible sources, and assisting in the preparation of the development strategy and action plan to help communities help themselves (OEA, 2002).

The OEA ordinarily offers impact aid to assist communities *after* the localities have suffered economically from defense activity. Though some aid is available to a community once it has been decided that a base in its area will close or be downsized, there is no existing federal initiative or program that has as its objective the decreased reliance of defense dependent locations upon continued military spending. Because of the time required to fully implement any economic development program, we will see that giving notice of an impending closure or other reduction in spending is usually not sufficient to prevent substantial impacts on the local economy and the resultant negative impact on the community. This paper proposes that the language in the OEA regulations be modified to allow them to assist communities *before* the communities are negatively impacted. In other words, the communities can use the OEA as a planning resource with regards to economic development.

The military bases themselves would not have to take an active role for the diversification plans to be implemented. However, there might be occasions when a particular base would have a facility or other resource available which can be put to use by the community.

Broadening and strengthening a community's economic base will have benefits that extend beyond local neighborhoods and even beyond the state. The literature shows that dollars

invested in defense production provide fewer tangible returns in terms of economic stimulation and jobs produced. On the other hand, dollars invested in developing private sector economies tend to have a much broader and more significant impact at both the local and national level. In addition, a local economy less dependent on defense spending would probably have less resolve in its attempt to block the closure or downsizing of a nearby base when the facility is no longer needed. Hence, a lot of the incentive to keep underutilized or unneeded bases in operation would be alleviated.

The benefits of economic diversification might also extend to military personnel on the bases themselves. When military members retire or leave active duty in a particular area, they often seek jobs in the private sector in those same communities. Also, their spouses and children often want to work while the service member is still on active duty. More jobs in the community can certainly help accomplish those objectives.

Governments have become more involved in promoting and facilitating economic development, however, their limited resources have produced limited results. Communities have explored and attempted many different ways to stimulate their respective economies. The free market economy has sometimes left some communities searching for ways to maintain or to regain their economic balance. Governments, up to the federal level, have sometimes had to step in when the private sector appeared to falter, particularly when many residents were left unemployed, under-employed, or with no other option but to search for work elsewhere. A lot of communities have few public resources available to lure businesses or establish economic enterprises in their areas. As will be shown, the communities that are successful in avoiding the extremes in the economic boom-bust cycle are usually those that have some type of competitive advantage or have a diversified economy. The ability to generate economic output from several major sectors within the community is a distinct advantage in maintaining a stable local economy.

In the final analysis this report concerns local economic development. It is intended to provide alternative means for local communities to reorient themselves and improve the

economic potential of their neighborhoods. It seeks to go beyond ways to simply make more jobs available: it will provide a means of broadening the economic base. Therefore it is essential to understand the effects of any policies on both the long range and short range economic objectives (Blakely, 1994). This report proposes a program that will alleviate the need for impact planning by preparing in advance to actually anticipate and effectively deal with any potential impacts that might occur. In essence it is contingency planning because it tries to predict the worst and best possible outcomes (Blakely, 1994). The final process will be one of public-private participation in assessing needs and strengths, and then devising plans, programs, and projects that will initiate the change to a more broad based economy. With federal support, local programs will be fashioned that will provide a unique economic development response to each particular locality.

The resulting policy objectives, then, will be to produce local economic development strategies that will provide a more reliable and steady stream of revenue, reduce vulnerability to the external impact of decreased defense spending, create good jobs for citizens, and increase the overall quality of life in the locality. The programs must be chosen with a realization of economic uncertainties and political constraints and knowledge of what was tried in the past. Local officials will have to get the most out of the funds that would be available to them (Clarke and Gaile, 1988).

The report begins by providing an analysis of the literature by first giving a general view of the recent past as well as of the current economic situation as it exists in the defense economy and in military communities. The report proceeds to discuss the impacts of defense cuts on communities and why the topic of diversification is relevant. It goes on to discuss why communities would benefit by adopting a stance of economic diversification. The report will reveal some of the social and political implications of modifying the economy of a defense-dependent community. The effect of cyclical defense spending on these communities is examined, with a study of some specific towns.

The report also presents a study of the difficulties and barriers that would need to be overcome in diversifying an economy that is heavily dependent on defense spending. By analyzing the experiences of several localities, this paper then notes the manner in which different communities have dealt with the challenges of rebuilding their economy. In seeing what these localities have had to endure and the difficulties they have had in recovering from the economic jolt, we can gain an idea of why the implementation of a new concept is warranted. The report discusses means by which the Department of Defense and the community can work together to produce economic advances. The end product is a process that shows how to diversify a local economy heavily dependent upon defense spending. The diversification process is developed and presented, and then theoretically applied to an actual community.

The Argument

Communities located near military bases tend to develop an economy and culture that is heavily dependent on that military installation. This dependency has proved to have a negative impact on some communities. Many locations, including Killeen, Texas, St. Louis, Missouri, and even the San Francisco Bay area have suffered economically as a result of base closings, downsizings, or some other decreases in defense spending. These localities allowed their economic well-being to become too closely tied to the flow of defense dollars. This paper argues that communities can use the fact of their dependency on defense spending and their proximity to military bases to establish a more diverse local economy. The federal government should help defense dependent communities diversify into more non-defense related sectors. This can be accomplished, it is argued, by communities implementing an economic development plan that utilizes the Department of Defense's own Office of Economic Adjustment as a partner. With grassroots support for a comprehensive and progressive plan of action, communities can overcome barriers to economic diversification. Debates on this type of diversification have been

mostly theoretical, centering mainly on defense industry changes rather than on changes at the community level. By focusing on communities that have been negatively impacted by decreased defense spending, this paper shows steps that can be taken to strengthen an economy against such downturns. A mutually beneficial partnership can be established that will fortify the local economy and foster a decreased dependence on defense spending, relieving the Defense Department of having to, in effect, support the communities.

The literature showed that when bases downsized or closed, the initial effect on the respective local economies was negative and the responses to the negative influences varied. The communities that fared better were those, like Quincy, Massachusetts, or Wichita, Kansas, that were able to eventually transform the military losses into economic benefits in other sectors that made up for the defense spending decreases. The more successful communities had a plan in place and strong organizations to implement those plans. Those localities that ended up with positive outcomes also had resources to attract new industry and capital to invest. The communities and residents that did not fare as well were very dependent on defense expenditures for their economic survival and had no plan in place to account for the lost economic output, or for adaptive reuse in the event a base or defense contractor closed or was downsized. For the localities that struggled to adjust, their hopes rested almost entirely on political pressure to keep the bases open or to scale back the reductions in operations. Once the political gestures proved fruitless, the communities generally experienced significant economic decline.

Many areas lack the resources needed to make the structural improvements necessary to improve or broaden their economy. Yet, some of those same areas can no longer count on bases being as economically significant as they have been in the past. With some assistance, communities can take the initiative to prevent a severe economic downturn in their local economy.

It is not unusual for federal, state and local governments to become involved in economic development policies. The federal government has generally provided various forms of

development assistance to support national policies. Therefore, if the situation of defense dependent communities becomes more widely known there is a chance that the issues will be addressed. One would hope that by understanding some of the principles in this report, decision makers can see development grants to communities as the wise investments they really are and could more easily convince others of the benefits. The literature suggests that investing some federal money in private enterprises would be much more effective from an economics viewpoint than spending the money on defense.

States have also increasingly promoted policies to encourage the transfer of research and technology. Additionally, states and local municipalities have routinely developed policies intended to encourage entrepreneurship through assistance to small businesses, venture capital programs, and through the development of business incubators and industrial parks.

This report will conclude by showing that an economic diversification development process can be established and applied to a defense dependent community. The process can be shown in a model that can be used to construct a framework tailored by the community itself. The end result will be (1) the establishment or expansion of local economic sectors that do not rely on military spending for their survival; and (2) an increased capacity in the area's basic economy.

Obstacles, Limitations, and Assumptions

Though the development process can be applied widely (even if slightly modified), each community will have to build its diversification program based upon its own local data and demographics. Since every geographic area is different in numerous ways, any planning process or model derived from this research would need to be adapted to suit the particular locality in which it would be used. The information included in the process is also based on what has happened in the past and offers only general speculation on what will happen with the nation's

economy in the future. The types of personal capital and the types of industries that will be in demand in the future are not known for sure. Therefore, communities would have to conduct a very thorough self-inventory and analysis to determine where to focus their economic development efforts. This research assumes, among other things, that more bases will be closed or downsized and/or significant defense programs will be cut. It also assumes that other defense dollars will be directed at different priorities (other than for bases and base personnel) and fewer defense dollars will be available in some base communities. Even with the events of September 11th, the closures scheduled to be announced for 2005 are proceeding. In fact, it is conceivable that money that would have gone to various bases will now go towards other terrorism related purposes instead.

To help support the arguments, the next chapter provides a review of some of the existing literature on the topic of defense spending and its economic impacts. It begins with an overview of the history of defense spending reductions as it relates to communities. Though the primary consideration of this paper is on communities adjacent to military bases, reviews of literature dealing with defense contractors and corporations are also included. The reason for this is that defense spending reductions will have a similar impact on a community whether the reductions result from downsizing or closing a base, eliminating major defense construction projects, or from a defense contractor closing its operations. This paper focuses more on military communities simply to help narrow the topic. The literature review goes on to look at efforts that have been taken in the past to counteract the effects of reduced defense expenditures in selected communities. In looking at past recovery efforts, we can see what effect federal government assistance has had on helping the impacted communities move forward. Next, the paper examines the cyclical nature of defense dependent economies. Along with its effects on neighborhoods, that section looks at the amount of money spent on defense in relation to its impact on the overall economy. Finally, the advantages and relevancy of economic diversification are outlined.

Chapter 2

REVIEW OF LITERATURE

The literature reviewed discusses some of the current issues pertaining to defense spending and its impacts on communities, as well as how some localities have dealt with the issue of decreased expenditures, along with why diversification is desirable and relevant. Much of the existing information will help shape the diversification process proposed later in this paper. The following sections will trace some of the history of defense spending reductions and some of the federal and state government policies that were instituted to assist affected communities in the past. Some programs that have been devised to help defense industry corporations, workers, and communities will be discussed in the context of how they were actually implemented in specific locations. These sections will also look at arguments made for different ways in which the government should counter the economic effects of decreased spending on the military. The literature shows that few efforts have been tried on a broad scale to counteract defense spending reductions before they actually take place and before the full economic blow is felt. The way in which defense cuts have influenced the workforce will also be addressed in order to provide a sense of the instability that can emanate from a faltering or unpredictable local economy. Finally, the cyclical nature of the economies of defense dependent communities will be addressed. By looking at the uneven influence on defense dependent economies, we can see why it is in the communities' best interest to expand their local economic base and reduce their dependency. Since the ultimate economic results are similar, the literature review will include the effects of reduced military spending in both industry and at military bases.

Historical Perspective of Defense Spending Reductions

Historically, when the United States has been at war or has felt threatened with the possibility of a war, there were few issues raised with regards to the amount of money the country was willing to spend on its defense. Prior to the recent terrorist attacks, the amount of the national budget spent on supporting the military was increasingly scrutinized. Defense industries and military bases as well as communities strongly dependent on defense dollars had to adjust to a new reality. In recent years as the threat to the nation's security appeared to subside, the country felt less of a need to continue to commit extraordinary amounts of funding to national defense. With renewed talks of base closures, some communities became apprehensive. With an appropriate policy of diversification in place, these localities can more confidently face their future.

Government policies (such as the TVA or urban renewal) aimed at improving the condition of a particular region or of a specific industry are very much a part of the United States' economic history. This is especially so in the government's efforts to assist areas negatively affected by a decrease in defense spending. With varying degrees of success, an assortment of agencies and programs were established to help areas recover from defense induced economic downturns. Some of these programs were part of larger, nationwide efforts, and some targeted specific geographic locations. Paukert and Richards note that during the 1960s, the "War on Poverty" led by the Kennedy and Johnson administrations helped to bring about regional policies intended to help rural areas (some affected by defense cuts, some not), such as Appalachia and the Mississippi delta, as well as central cities. Even with the relative increases in wealth after World War II and the improved living standards it brought, plus an extremely productive private sector economy, these particular geographic areas were slow to see the economic benefits (Paukert and Richards, ed., 1991).

The federal government offered to assist these regions by offering community development grants, job creation initiatives, job training, and public works projects. In 1962, the Department of Commerce set up an Area Redevelopment Administration (ARA) to attract companies to these areas by providing them grants or loans if they relocated. The ARA was the precursor to the Economic Development Administration (EDA), which was established in 1965 to improve employment opportunities in designated areas by providing aid to encourage private enterprises to expand. In its early days the EDA ended up spending most of its budget on public works projects like sewage treatment and water systems¹ (Paukert and Richards, 1991).

State and local governments have been actively involved in economic development policies for several decades. For instance prior to the Depression, Mississippi's "Balance Agriculture with Industry" plans provided low-interest loans, help with site preparation, and programs to help businesses train workers. Mississippi was not alone as other southern states formulated similar programs, as did northern states beginning in the 1940s and 1950s. In 1960, there began to appear numerous state programs designed for the primary purpose of attracting businesses from other states (Paukert and Richards, 1991).

By the 1980s, many states were questioning whether they had been wise in their earlier efforts to attract smokestack industries. Studies during that time period suggested that in order to create jobs, geographic areas would be better off expanding existing plants and establishing new small business enterprises in the area rather than attempting to lure plants from other locations. States and local communities responded to this news by instituting policies that would support entrepreneurship by offering help to small businesses, developing venture capital programs, and establishing business incubators and industrial parks. Added to this was the fact that many states and local jurisdictions also began to implement policies intended to promote the transfer of research and technology – "the manufacturing of new ideas." This method of generating new

¹ The original concept of the ARA included elements that would later be implemented in the enterprise zone idea (Paukert and Richards, 1991).

enterprises has often been termed demand side policy as opposed to the earlier supply side policies of providing tax breaks, advertising, and low-interest loans (Paukert and Richards, 1991).

While some states have struggled for a feasible means of stimulating their economies, the federal government has sometimes made the task more difficult by significantly reducing defense expenditures. The United States cut defense spending by 40% between the years 1968 and 1974, the years that marked the end of U.S. participation in the Vietnam War (Renner, 1990). In Michael Renner's writings, we see that industries and communities that were heavily supported by pentagon spending had to either adapt economically and socially or accept that they would no longer be viable, transformed instead into a company or community in irreversible decline. Corporations whose primary or only business was to produce goods for the military typically chose one of two options: diversification or conversion.

There is a distinction to be made between diversification of a defense corporation and diversification of a defense dependent economy. According to Renner, many companies that produced arms decided to diversify instead of trying their hand at conversion after the Vietnam War. In this sense, diversification is defined as "defense contractor's attempts to lessen reliance on military orders simply by ridding itself of military divisions and acquiring civilian-oriented companies" (Michael Renner, 1990, p. 8-9). Due to lack of concern for the employees and therefore the local communities, the companies did not try to find alternative work for those who lost their jobs. The workers who lost their jobs were not retrained and no effort was made to retool production lines to produce civilian rather than military products. In addition, the companies did not plan to reuse any of their existing resources in their transition into civilian markets. This is the same approach many defense contractors took during the 1990s military drawdown (Michael Renner, 1990). With regards to corporations, their concept of diversification has not benefited local communities.

Rather than diversifying a private company, defense corporations should opt for conversion to non-military production. This allows for a more comprehensive approach that uses

the reversal of the arms buildup as a positive social and economic opportunity. For Renner "it pulls together the political, economic, and technical processes needed to release skills, equipment, and other resources now being used for military-oriented purposes and guides their transfer to alternative civilian uses" (Michael Renner, 1990, p. 9).

Since this paper is primarily concerned with the effect of defense spending reductions on the local communities, particularly those around military bases, a study of this approach is very useful. The crux of my argument is that communities should prepare themselves to handle economic declines in a major industry, in this case the defense industry. Sufficient preparation requires that alternative use strategies be mapped out in advance as opposed to waiting until a key industry actually goes away. This type of advanced planning includes conducting an inventory of the existing skills in the community, assessing how the reductions will affect individuals and communities, and identifying alternative products and markets, among other actions (Michael Renner, 1990, p. 9). The planning should be done with the intent of instituting changes that will counter the potential long term effects of decreased expenditures. When decisions are made to change the amount of defense spending, those decisions tend to last for several years.

The defense drawdown after very active U.S. involvement in Vietnam lasted until the mid 1970s. "During the Carter-Reagan buildup between 1976 and 1987, jobs in the military industry doubled to almost 3.4 million – a postwar level surpassed only during the conflict in Korea" (Michael Renner, 1990, p. 19). With this change in economic fortune came concurrent changes in communities affected by this give and take of government largesse. Different communities adopted various approaches to deal with this economic situation.

In *Diversification after the Cold War: Results of the National Defense Economy Survey* Jonathan Michael Feldman found that beginning in 1987, the number of individuals working in the private sector of the defense industry declined steadily until 1995, dropping from a peak of 3.6 million workers down to 2.3 million workers. This decline did not bode well for local communities: a study of defense industry workers from major defense contractors in New Jersey

and St. Louis found that less than 50 percent of laid off workers had found new jobs one year later (Feldman, 1997). Usually no plans existed prior to the layoffs to handle this kind of situation. It was not until the full scale and the impact of the job losses were felt that anyone made a decision to do anything about it. Policy makers tended to show more concern for the solvency of the corporations than for the individuals directly, or for the communities affected by large numbers of unemployed residents. Solutions presented involved devising ways to "help defense firms make the transition more easily to new, non-military markets" (Feldman, 1997, p. 5). With this in mind, the government put forth new initiatives such as the Technology Reinvestment Program (TRP) and some procurement reforms to help defense firms gain a profitable foothold in non-military markets (Feldman, 1997, p. 5).

The upswings and downturns in the defense spending cycle, along with new government programs to help the defense companies, and the potential for exploiting defense industrial capacity for use in the civilian sector have prompted scholars to take a close look at the capacity of defense firms to expand to civilian sales (Feldman, 1997). Few if any studies have been done to determine a community's ability to create employment to absorb excess labor from the various components of the defense industry, whether that excess is a result of base closures or corporate workforce reductions.

Feldman believes that scholars in the fields concerned with defense spending can be divided into three categories. The first group he dubs "naysayers," and it includes those who argue against diversification of defense industries. They believe that the economic costs of conversion from defense to civilian use have high "transition costs" and that those costs outweigh any social costs associated with layoffs. This group of advocates, along with their Wall Street investment banking firm allies, have encouraged and pressured several of the firms that were diversified to get rid of their commercial operations and focus exclusively on defense markets (Feldman, 1997). These corporations make reaching decisions with little apparent input from the

local communities where their employees live. This is not surprising since a corporation must answer to shareholders and not necessarily to the community.

The second group Feldman speaks about is what he calls "minimalists" who argue that the economic adjustment from military markets to civilian markets is simple and easy. In their minds defense firms are quite flexible, and they are able to efficiently transition from military to civilian production with minimal transition costs (Feldman, 1997).

Feldman defines the third group of scholars as those who take issue with both of the first two (and includes Melman, Dumas, Markusen and Yudken, and Ullman). This group argues defense firms can survive defense cutbacks by reorganizing their resources and obtaining outside commercial assistance (Feldman, 1997). This is the only group of the three to exhibit an awareness of the communities external to the defense entities. They assert that local economic development agencies, commercial experts, and supportive government industrial policies and programs could be the source of the outside assistance (Feldman, 1997). In effect, this group says that the local community, as well as the state and federal governments, have a role to play in picking up the pieces left from defense department cutbacks.

State and local governments obviously are prone to become involved in efforts to improve their economies. The question in such interventions, according to *Enterprise Zones: New Directions in Economic Development*, is what conditions are necessary to bring about such involvement. The rationale for involvement, as well as the particular policy tool to be implemented, "has varied greatly across time and across jurisdictions" (Roy E. Green, ed., 1991, p. 7).

Green argues that there have been some state and local policies that have had significant positive influences on the direction or location of economic change.² He also says that states

² He goes back to the colonial government of 1789 to cite as an example the charters that were granted to companies, the tariffs that were used to protect certain industries and products, and specific rights that were given to favored companies that allowed those companies to enjoy a competitive advantage over potential competitors. (Green, 1991).

have been involved in the development of the infrastructure and human capital investment (Green, 1991). This type of active government involvement was hardly questioned as being inappropriate. However, some neoclassical economists sought to downplay the significance and the effectiveness of government assistance in the economic growth across the nation or in a particular region.³ But, as Green asserts, it is the very involvement of the government in economics, what he calls institutional economics, which establishes an environment conducive to the success of private enterprises. He makes the point "that the social rate of return on investment in state-funded education, agricultural research, and public health can be demonstrated to have exceeded their initial direct costs." Each of these is a government funded effort that would not have been offered by the private sector (Green, 1991).

A cursory look at the economic history of the United States shows that the types of industries that were dominant at any given time have tended to change, as has the breadth and geography of those industries. Typically, local markets were taken over by much larger companies serving a wider market. Family farms became corporate farms. Modes of transportation advanced. Each of these changes also brought about significant changes in the workforce and deep changes in the communities. Indeed, it has been the individual and the community that has had to adjust most to these changes (Green, 1991).

The defense industry is at least as susceptible to gaining and then losing a significant share of the national budget as other markets are to swings in the economy. The current mode of thinking with regards to what the country's defense posture should be is an excellent example. The nation's response to the terrorist attacks has been to refocus on armaments, even to the detriment of other programs and the national deficit. However, this posturing has not curtailed discussions and plans for the next round of base closures scheduled for 2005. It is very doubtful that anyone can make an accurate prediction as to what the state (or even the function) of the

³ This is because throughout the nineteenth century the amount of revenue collected and spent by the government was slight in comparison to the capital investments, the great labor force, and the technological advances in the private sector (Green, 1991).

military will be in the next decade. The concept of what the military ought to do and where it ought to be changes at least as often as major world events and presidential administrations.

In *Fortress America*, William Greider asserts that those who have given plenty of thought to the topic (what he calls “military thinkers”) continue to devise “more distant plans and concepts for a futuristic warfare conducted by fantastic new methods and systems. They intend to invent and build this future war-fighting capability while they keep paying for everything else – all the present forces and new weapons already in the pipeline” (Greider, 1991, p. xi). This, Greider says, does not add up. The current national budget deficit also suggests that such ambitious aims and objectives cannot be paid for. In their attempts to fund the ambitious military plans, defense leaders are having to trim whatever and wherever they can. They find that it is often necessary to play a game of give and take, in some cases having to take weapons they do not really want in order to obtain something they really need. Sometimes training and other basic necessities have been neglected in order to pay for some other line item (Greider, 1991). None of the military thinkers can predict with any accuracy what the final annual costs will be for the ongoing battle against terrorism.

Basically, there is no way to maintain the status quo in national defense and there are too many contradictions within the system. According to Greider, a day of reckoning is not far off when we can no longer “juggle accounts” or hide the mess that has been building up over many decades. Until then, he says, the military industrial complex as we have come to see it will steadily erode (Greider, 1991).

As Greider sees it, the dramatic downsizing that took place in the 1990s, which saw over one million defense industry workers lose their jobs, did not go far enough in bringing the capacity of the industry in line with the known requirements. He believes that there is still a surplus of productive ability with too many factories not receiving enough orders to justify their existence. In the long run the taxpayer, through the government, pays for this surplus while the

industry awaits an unlikely rejuvenation (Greider, 1991). Currently, however, that rejuvenation is perhaps not as unlikely as it once was.

Historically, political conservatives have objected most to any efforts by the government to assist communities and individuals in economic peril. Yet, Greider indicates that conservatives who oppose federal regulations imposed on businesses or stand against measures taken to stimulate the economy, offered their support for the government in its role as the lone investor in, and the only market for the Cold War industrial complex. Those on the far left criticize this apparent contradiction but they have no qualms accepting the jobs created as a result and the improvements in the economy that sometimes followed (Greider, 1991).

Changing the mentality that established such a huge military industrial complex will take some effort. A major impediment is that so many entities believe they stand to benefit more from maintaining the status quo. Past efforts to close bases or cancel major defense contracts revealed some of the parochialism involved and the type of entrenched culture that has evolved. The armed services depend on Congress for all their expenditures, no matter how minor. Accordingly, in order to affect as many congressional districts as possible, they chose to disperse their installations widely. Defense prime contractors played a similar game in spreading their subcontractors and suppliers in order to persuade enough senators or representatives to support a project or contract for the good of the folks "back home" (Greider, 1991).

Notwithstanding the efforts of the military and of defense contractors, reductions in defense spending have occurred over the years. The economic impact is usually not spread evenly among individual workers as some types of jobs tend to be cut more than others. Ann Markusen points out in *Cold War Workers, Cold War Communities* that blue collar workers are typically impacted more severely than other workers. For example, the aerospace field depends on the military for at least 60% of its revenue. In that field the proportion and the level of blue collar workers declined as automation helped to produce more expensive weapons in smaller numbers (Markusen, 1994).

Even during a period of time when the total number of people employed in the aerospace industry grew, there were 40% fewer jobs for production workers in 1987 than in 1968. In fact 440,000 of those workers lost their jobs and their numbers as a percentage of the total aerospace workforce dropped from 53% to 45% (Markusen, 1994). On the other hand, the industry has sought scientific and technical workers to design the automated equipment as well as the weapons and aircraft systems themselves. Markusen argues that by the defense industry pushing out blue collar workers and increasing the numbers of workers with scientific and technical backgrounds their government contracts, the government contributed to worsening the income distribution in the United States. She points out that the nation's income distribution has worsened since the early 1970s, as many of those types of middle income (often unionized) blue collar jobs began to disappear, creating a so-called "missing middle (income group)." The income gap increased even though union leaders were avid supporters of the cold war (Markusen, 1994).

The reductions in the number of blue collar worker, combined with discriminatory hiring practices and education requirements in the white collar fields, meant that defense plant workforces were dominated by older white males.⁴ Predictably, minorities in urban areas, those working in defense plants from Buffalo through Milwaukee, suffered the greatest amounts of displacement. Also predictably, the communities in which these individuals lived were impacted the most as a result of the elimination of blue collar jobs. Many of the young people in those communities joined the ranks of the "underclass" (Markusen, 1994). Jobs produced in communities can help overcome this negative impact.

We can see that there are historical precedents for the federal government lending assistance to industries and communities that have suffered economic declines, whether because of reduced defense spending or for other reasons. The military economy tends to be somewhat

⁴ Non-white males and women were offered jobs in naval shipyards and aircraft assembly plants during the Second World War, however, once the war ended the jobs were given back to returning white males. At the same time, there was a steep drop-off in the numbers of blue collar jobs in employment sectors not related to defense, where minorities and women had made some progress in the 1980s (Markusen, 1994).

unpredictable and at times it must react to the events of the day. Most of the government's efforts as well as most of the debate on the topic have focused on defense corporations and how they can withstand defense cuts. However, communities have made efforts to deal with spending decreases in their own ways.

Approaches to Address Defense Reductions

Anytime a community loses a significant number of jobs, for whatever reason, it has far reaching effects. As the defense industry has experienced spending increases and cutbacks, so too have communities into which this money flows. When required to deal with the spending decreases, communities devised a variety of approaches to cope with the challenge. In order to understand this phenomenon, it helps to have some understanding of the defense economy and the community's place in, and effect on, the overall economy of the nation. A change in defense spending, whether that change is an increase or a decrease, is not inherently positive or negative. As Paukert and Richards indicate, increases in defense spending can have the effect of adding to the demand side of the supply and demand formula, and it can help advance technical change. Conversely, decreases in defense expenditure will cause a loss of jobs and a decline in short-term economic growth unless that decrease is offset by private investment or some other form of public spending (Paukert and Richards, 1991).

Distinguishing between the short term and long term effects, Paukert and Richards argue that military spending has some negative aspects that might not be so obvious. They assert that in the short term, all things being equal, an increase in defense spending results in "job suppression and short-term adjustment problems" (Paukert and Richards, 1991, p. 1). The long term effects are also negative, they suggest: "Defense expenditure has no particular economic benefits (national security aside) that could not be achieved by other forms of public or private spending" (Paukert and Richards, 1991, p. 1). To support their argument, they assert that materials used in

war efforts are usually not suitable for productive investment. They also point to the works of classical economists Adam Smith and David Ricardo⁵ who believed that once spending on the military reached a certain level that its return (in the form of national security) began to decline and eventually became more of a pure drain on the economy. After a certain level, they saw investments in defense as a "withdrawal from the productive capital of the nation" (Paukert and Richards, 1991, p. 2).

It is not only the level or actual dollar amount of investment that is impacted by defense spending but also the structure of investments. The effects of defense spending on non-military enterprises vary according to the type of industry, but the cumulative effects are felt throughout the entire national economy (Paukert and Richards, 1991). More money invested in defense means less invested elsewhere. Attempts to address the variable spending patterns have been made at the federal, state, and local level.

Communities have ordinarily been forced to deal with the economic blow after it actually strikes, rather than being in a position to prepare for the blow ahead of time. One might pose the question: If the government is willing to help assist the defense industries after defense spending reductions, then why should it be concerned with the effects on local communities? After all, it would seem that money spent for military bases and assistance provided to defense corporations will trickle down to the workers who actually live in those communities. With regards to military bases, part of the answer to the question posed can be found in "The Social Impact of Naval Base Development on a Coastal Community: Camden County, Georgia." In that dissertation Mary Margaret Overbey asserts that military bases have much more than a mere monetary influence on the local geographic area: there are also significant social, environmental and cultural influences. Military personnel and their families usually become a major part of the community as many find housing out in the local community and experience life as the locals experience it. When bases

⁵ David Ricardo, *The Principles of Political Economy and Taxation*, London: J.M. Dent & Sons, 1973; original edition 1817.

expand or contract, for whatever reason, there is a direct affect on the community that goes beyond finances (Overby, 1982).

Since many effects localities suffer (such as unemployment, reduced revenue, etc.) are preceded by the financial blow, we focus here on figuring out the manner in which a community can address the negative economic affects. We find that there have been some common elements to many of the plans for economic revival. In *Creating and Economic Development Action Plan*, Thomas S. Lyons and Roger E. Hamlin cite the local citizenry itself as a local planner's most important resource in creating and developing a strategy for economic development. It is important, they say, to clarify why proceeding through a process of economic development is important and to know how that process can be used as a guide for setting measurable future objectives. The plan of action should include an awareness of the political environment as well as means of relating the economic plan to other community development activities (Lyons and Hamlin, 2001).

Communities have pursued several different approaches to achieve their economic development goals and objectives. Typically included in those objectives are the creation and retention of jobs, expanding the tax base, raising property values, retaining wealth, lowering the poverty rate, providing economic stability, and becoming economically self-sufficient. Usually a community makes the achievement of several of these goals a priority (Lyons and Hamlin, 2001).

Although the community economy is the primary focus, the social considerations should not be ignored. Particularly when implementing projects of a significant size, what Overbey calls a "social impact assessment" might be warranted. "In examining impacts on demography, institutions, displacement and relocation, economy, community cohesion, and individual lifestyles, a social impact assessment attempts to ameliorate the impact of development projects on communities" (Overbey, 1982, p. 7).

When we focus on more recent economic development efforts, we find policies that are somewhat different from earlier efforts (Paukert and Richards, 1991). With targeting of

economic activities becoming more explicit, it is not unusual for specific industries or sectors to be singled out for direct state aid. There are also more efforts specifically aimed at assisting depressed regions. Certain types of activities, such as innovations in management or technology, small businesses, and the marketing and production of new inventions, are promoted (Paukert and Richards, 1991). A variety of indicators are employed to identify distressed regions and communities, including the rate of unemployment, age of the local housing stock, and the amount of population loss. Several states have used these indicators to direct economic aid at the state level. Of course targeting economic assistance is not an exact science. Even though it is sometimes easier to target geographic areas instead of individuals, we should obviously be aware that people of sufficient means also live in targeted areas just as poor people live in areas not targeted (Paukert and Richards, 1991). However, it is also a reality that unemployed people are not restricted to any particular geographic area.

The bottom line objectives for economic policy are for the initiatives to prevent or overcome the effects of a declining economy. A faltering economy can lead to a myriad of difficulties for governments should it also lead to a decreased tax base. In a poor economy more people are unemployed or under-employed. That means less revenue for the municipality and fewer dollars seeking sales and services. This affects the retail sales industry, companies providing services, property values, the quality of municipal services, and the quality of the school system. In extreme cases governments may face bankruptcy. These types of conditions make it very tough to attract any new employers to the area or even to retain the existing enterprises. Those who could afford to would leave, and left behind would be the poor and unemployed. Communities that are dependent on one or two large employers are at a greater risk of having to deal with these issues (Paukert and Richards, 1991).

In the 1990s, cutbacks and base closures in the San Francisco Bay area caused a 12 percent job loss in the area. The localities there developed a strategic plan to stop the loss of jobs and to turn around the effects the cuts were having on the local economy. The local governments

joined with private companies on a project that centers on efforts to help export businesses by establishing an electronic communication network that provided data on international markets. Within just a few years of the start of the program, local industries were exporting over \$20 billion per year (UALR, Jan 2002).

St. Louis was a leader in developing innovative responses to this type of economic adjustment challenge. The local governments joined together under the auspices of the St. Louis County Economic Council. They put together a program to promote diversification for small and medium-sized businesses that depended on defense contracts, and to provide some assistance to displaced workers. The help to business workers included support for basic business needs, export assistance and business financing assistance. The EDA provided capital for the St. Louis Metropolitan Revolving Loan Fund and the St. Louis World Trade Center, making loans totaling over \$770,000 to defense impacted companies and creating 186 new high-income jobs (UALR, Jan 2002).

The State University of New York (SUNY) helped the city of Long Island develop two programs to address defense cuts there. The first Long Island program was funded by the United States Department of Labor through a demonstration grant known as the Dislocation Aversion Project. This project led to the formation of the Department of Economic Development's Defense Diversification Project, with the objective of retaining and creating jobs. The objective was to be attained by assisting defense companies and their employees with diversification into civilian markets. The New York Department of Economic Development staff members worked with the companies to determine what their training needs were and fashioned a program with the help of the companies' management team and the State University of New York (Oden, Mueller and Goldberg, 1994). It has been difficult to determine whether the program has been successful. Judging from feedback from the companies that participated, jobs are being retained and there have been some modest increases in employment (Oden, Mueller and Goldberg, 1994).

The second program created was the jobs program which was established as a partnership between the Harriman School of Management and Policy, Suffolk County and Oyster Bay development associations, high tech firms and displaced defense engineers. The program was operated based on a model developed by Josph Pufahl and was intended to create new jobs by what he termed "value added behavior" (Oden, Mueller and Goldberg, 1994, p. 49). The model provided for four day per week of formal classes in business and technical subjects. This program has had some very modest successes.

The logic of making an effort to revive a distressed community or to prevent economic decline from occurring in the first place lies in preserving what the communities themselves represent. Communities have an accumulation of years (sometimes generations) of human and social capital, a developed culture along with cultural amenities such as churches, museums and libraries, in addition to community organizations and social clubs. They have existing schools, roads and a developed infrastructure. There are social and psychological advantages to maintaining these institutions, but there are also physical advantages to not having to build facilities to house the institutions in new locations should they have to move elsewhere. Containing growth within existing developed areas serves the additional function of not needing to construct new facilities on greenfield sites. In fact, residents of communities in new greenfield sites often experience a rapid increase in their taxes that allows the locality to cover the costs of new infrastructure (Paukert and Richards, 1991). It would, therefore, seem appropriate to promote redevelopment and prosperity in already developed areas by directing funds to revive localities facing economic decline, particularly where there is a strong probability that a renaissance will take hold.

There is little agreement among economists regarding which regions in decline ought to essentially be written off. Yet even without considering the economic implications there are political advantages for geographical targeting at the state and local level (Paukert and Richards, 1991). Traditionally people have moved from economically stagnant areas or areas in decline to

faster growing areas with more opportunity. However, there are those who have extremely strong ties to their neighborhoods and to their way of life. These individuals will make every effort to hold onto their way of life and their jobs. They will use the political process to help preserve their communities (Paukert and Richards, 1991). Even if their localities are in economic decline communities will rarely accept that their economies cannot be revived, regardless of experts' opinions. At any rate, those who are most likely to lose their jobs are also likely to be those who are the least mobile and most susceptible to being unemployed. Politicians will use this fact to argue for more assistance for their "constituents." This tends to result in too little money going into too few jurisdictions and no one receiving enough assistance to resolve their issues. It also leaves little funding or political assistance available for aid to increase mobility into areas that are prospering (Paukert and Richards, 1991).

Policies based on geography are criticized by regional economists as "emphasizing *place* prosperity rather than *people* prosperity" (Dunne, 1991, p. 21). The longer a geographic area is in decline the more difficult it is for the area to recover, particularly if the infrastructure has been allowed to deteriorate and the *crème* of the workforce departs. When this kind of decline occurs, the locality is left with a sizable population out of work and depending on services from a municipality operating on a shrinking tax base. The task of attracting any type of industry (or skilled laborers) under these circumstances becomes exceedingly difficult (Dunne, 1991). So, perhaps the critics of policies targeting places would say that the investment would be better used if it helped train people to take jobs in other locations. If training for jobs available elsewhere were to become the priority, places not likely to recover without substantial investments would be abandoned.

Government subsidies only go so far in attracting businesses. Eventually firms will locate near areas that provide the types of services that they need and the skilled labor to make them prosper (Dunne, 1991). Some states have the willingness and the resources to influence business locations within their borders more than others. This is an advantage that could be

attributed to any number of reasons, such as cheap labor or a well educated work force. Other states might find that there are geographic areas within their domain that need assistance in establishing viable enterprises. When those areas needing help also happen to be dependent on the military economy, they should be eligible for targeted assistance.

States have sometimes found targeting based on need to be a difficult endeavor. One alternative is targeting based on the potential for economic growth. But targeting based on growth potential would leave out those who have lost their jobs in declining sectors. For example, advanced technology is considered to be a sector with huge growth potential. However, few educationally or socially disadvantaged residents, or individuals laid off from manufacturing industries are likely to find employment in the high tech sector (Dunne, 1991). Need based targeting is also stymied because often those states that have areas that need the most assistance have the least amount of resources. Also, for states with large populations, their resources tend to be spread too thinly (Dunne, 1991). Whether targeting assistance to help neighborhoods in decline or attempting to diversify a state economy, the challenges posed at the state level demand creative, bold solutions. As we will see, Massachusetts and Michigan are two states that have had significant experiences in dealing with the prospects of losing a large part of their respective defense economies.

Massachusetts and Michigan Attempts at Proactive Planning

Since any aid a community obtains from the federal government will inevitably affect the state to which it is sent, it is important to have some idea of where states fit in when it comes to defense expenditures. States have to take into account a number of concerns when it comes to defense spending. For example, Massachusetts and Michigan are two states that have attempted to deal with the consequences of a sizable defense economy. There were activists in Massachusetts that pushed for a change from an economy heavy on defense to one more

diversified. Michigan, on the other hand, was faced with involuntarily losing a large share of its defense dollars and therefore wanted to get some idea of what the economic impact would be upon its workforce. The way in which defense spending was addressed in each case reveals many of the complexities faced by governments when it comes to addressing the issue of defense dollars.

What happened in Quincy, Massachusetts is provided here to show some of the interests and stakeholders involved in any effort to go forward with a concerted effort to reduce defense dependency. Although the impact of whatever changes would take place at the shipyard would have the biggest financial impact on the city of Quincy itself, the posturing and dealing that went on to affect the future of that facility really reflected the broader battles that took place throughout the state in its effort to come to grips with what to do about its growing military dependency.

The case of the Quincy Shipyards illustrates the possibilities and the potential constraints involved in of trying to curb the dependency. Those in Quincy who advocated lessening dependency on the military found that the military economy itself was a formidable obstacle. Defense spending had played a role in improving the rapidly growing economy of the state. The arguments for and against reducing dependency essentially centered around the question of just how much responsibility for the expanding state economy could be attributed to the state's defense industry, and how much was due to the growth in the civilian sector (Feldman, 1989).

Massachusetts has consistently been among states at the top of the list when it comes to receiving defense dollars. In Fiscal Year 1985 the state ranked fourth in the amount of money it got for its defense industry, behind only California, New York, and Texas. With its numerous universities and the large university population that resides there, it is considered to be one of the more liberal states, ranking next to California for having the most peace organizations (Feldman, 1989). *Making Peace Possible: The Promise of Economic Conversion* (Dumas and Thee, ed., 1989) gives some insight into the role the state of Massachusetts played in local communities' efforts to change from an economy heavily weighted towards defense to an economy supported

primarily by other industries. It also shows the influence that significant defense spending can have on a whole state (Feldman, 1989).

In the decades of the 1970s and 1980s, Massachusetts had to adjust to the economic consequences of deindustrialization on the one hand and an increasing dependence on spending for the military on the other. Communities and labor unions fought to have legislation passed that would protect them from the plant closings caused by deindustrialization. As for the spread of the defense economy, activists fought to impose limits on defense contractors, initiated a Massachusetts Institute of Technology study of defense dependency in the state, and was responsible for passing a state and city referenda called "Jobs With Peace" that questioned the negative impact that national defense spending was having on communities. In addition, there were nuclear freeze activities throughout the state (Feldman, 1989).

However, most residents and observers believe that the local initiative by peace activists, community groups, and progressive trade union members to press General Dynamics, the state government, and local union leaders to support converting the Quincy Shipyard (which was then building navy ships) was the most important action taken at the time (Feldman, 1989). The military industrial complex was a very significant part of the state's economy.

Looking at the statistics of the Massachusetts economy from the years 1975 through 1985, it is evident that more than state economic development programs were at work in producing the growth that occurred. The military economy of Massachusetts grew faster than the defense economy nationwide (Feldman, 1989). The high technology sector of the non-defense economy was itself very much dependent on military purchases. So, military spending reached into areas dominated by defense (primary industries) and into industries not specifically catering to the military (secondary industries). During the Reagan years an increase in spending occurred in both primary and secondary industries. Total employment in the defense industry went up by 16 percent, or 15,300 from 1980 to 1984 (Feldman, 1989).

Yet, there were also indications that the Massachusetts economy was not entirely dominated by defense spending. But since spending on defense was at least one of the major cogs in the economic growth engine, some politicians and defense contractors sought to block initiatives intended to reduce dependency on defense money. Since the average defense employee's wages were more than the average of other state workers, state economic planners and unions also opposed cuts in spending.⁶

Essentially, those in favor of keeping the defense dollars rolling in managed to minimize proposed legislation to limit the growth of the defense industry or even to provide defense workers with notification of when plants might eliminate substantial numbers of workers from the payrolls. These constraints help explain the state's limited response to the proposed changes at the Quincy Shipyards. One committee advocated that the shipyard be changed to civilian use while maintaining the capabilities of conducting repairs of navy vessels (Feldman, 1989). The state legislature passed a state law⁷ that gave state planners more authority to promote a change in use for the Quincy Shipyards. Coming into effect in 1984, the law was intended to provide funds for a trust that would:

...provide flexible high risk financing necessary to implement a change in ownership, a corporate restructuring, or a turnaround plan for an economically viable, but troubled business which faces the likelihood of a large employment loss, plant closure, or failure without such change in ownership, corporate restructuring, or turnaround plan (Feldman, 1989, p. 149).

⁶ "The economic incentives for continued ties to the military translate into political barriers which limit political intervention by the local state on behalf of conversion. One report on the Massachusetts military economy summarized the position of the state's Governor as follows: ...On the one hand, admitting to any significant aid from military spending would both lessen the accomplishments of the Governor's own economic incentives and undercut the credibility of his critique of the 'Reagan Revolution' in federal budgetary policy. It might also lead to increased peace movement attention to state complicity in the Reagan military buildup. On the other hand, any negative attention to military contracting in the state would antagonize many of the high tech business leaders for whom the Governor has worked so hard in improving the state's 'business climate'" (Feldman, 1989, p.145).

⁷ The Mature Industries Law, which grew out of the work of the Mature Industries Commission (Feldman, 1989, p. 149).

In order for a corporation to obtain financial assistance from the trust, it had to show that it would experience a large loss in employment, or that its plant would close or fail without the trust fund assistance. With only \$2 million in initial funds from the legislature, their activities would be limited (Feldman, 1989).

Unions made efforts to have the state require that if plants were closed, the defense companies would ensure that as many union wage-scale jobs as possible would be retained. The state legislature only required that there was some sort of system that would send out a warning that identified industries or businesses likely to experience large losses in employment or plant closures (Feldman, 1989).

In July 1985, General Dynamics announced that it would close the Quincy Shipyards in the spring of 1986. The state commissioned a study of future uses in October of 1985. If the state had enforced its early warning provision passed by the state legislature, then it could have acted sooner. Most of those familiar with the shipbuilding industry knew that the industry was in danger. Had the state acted earlier it could have provided more time for the community to engage in economic planning as well as for time for the activists to convince the politicians to get behind the idea of economic conversion planning for the facility (Feldman, 1989).

Predictably, there was a lot of pressure placed on the state to find new jobs or other help for the laid off shipyard workers. The state offered to retrain unemployed workers, but the state did not support converting the shipyard to civilian use (Feldman, 1989).

Clearly the experiences with the Quincy Shipyards demonstrate the dynamics involved in determining the course of action taken at the state level. The decisions are influenced by the decreased demands of the military (e.g., for ships), and largely shaped by business and political interests. The particular strategy that protects the best interests of the industry is not necessarily going to be the best for the individual employees or the community. Those at the grass roots level have to be effective in forming coalitions that can muster enough power to have their demands met.

In Michigan the proportional share of defense dollars decreased throughout much of the 1990s. Also, the state had lost jobs in other sectors, such as the automotive industry. Any major job losses in Michigan were particularly hard felt. The state also made an effort to implement a local economic development policy that had as its objective the replacement of private sector production jobs with government production jobs (Gohrband and Gordus, 1991).

A study by Gohrband and Gordus on the possible effects of cuts in defense procurement on defense manufacturing employment in the state eventually concluded that military spending and the presence of a sizable defense sector workforce had negative economic impacts, particularly in the long term. Some of these negative impacts were externalities that had not been taken into consideration when the amount of defense expenditure was summed up. The influence of heavy defense spending on private investments, on the ability to develop private sector technology, and on the quality and type of employment was factored into the defense costs. The short term effects of defense cuts could be that unemployment will rise, the level of which will substantially depend on the amount of government spending to offset the rise. However, Gohrband and Gordus predicted that in the long run developing civilian employment to replace defense industry work would create more employment (Gohrband and Gordus, 1991). Their report showed an example of defense dependency and its affects on the region as well as on various occupations. The objective of the study was to predict the capacity of the regional economy to absorb labor released from the defense sector. It also described what the unemployment and other benefits would be for workers who would lose their jobs in the defense industry (Gohrband and Gordus, 1991). Also important, for the purpose of constructing this paper, is that the study revealed a blueprint for how to conduct a detailed probe into this topic:

Try to determine the degree of dependence on defense... in the region as a whole. Identify the [number of defense workers] employed in the regions. Then produce a skill and occupational profile for the region as a whole, in order to determine the differences that exist in terms of skill and occupational characteristics between the defense industry and the civil industry. Unemployment and job vacancies are examined... Also study the effects of reductions in defense procurement at the enterprise level. Employers' and trade

unions' attitudes to conversion are analyzed and their respective policies and strategies on defense conversion are surveyed (Gohrband and Gordus, 1991, p. 9-10).

Partly, the Michigan study was intended to determine which occupations were most likely to have the largest numbers of losses if defense spending was cut, and also to determine how difficult it was for people working in those occupations to be reintegrated back into the workforce. To do this Gohrband and Gordus first had to figure out just how dependent the state was on defense spending. This was accomplished in part by identifying economic participants in the defense sector and comparing their total number of employees compared to the total number of employees in the workforce. They also constructed "occupational profiles" on a few companies. The study concentrated on technical and professional workers since they assumed that clerical and managerial workers could find replacement jobs more easily. In addition, they put together an occupational profile of the geographic area so that they could figure out the capacity of the economy to absorb displaced labor from the defense sector (Gohrband and Gordus, 1991).

Gohrband and Gordus also had to get some idea of how defense firms would react to the possibility of cuts in defense spending and the probable loss of jobs. Part of the study included finding out what benefits would be available to displaced workers. In particular they wanted to know what types of help could be expected and how effective such help would be from the private sector, the public sector, or any combination of the two in partnership. In order to get a clear picture of the layoff's effects, any additional efforts to help provide new jobs were also studied (Gohrband and Gordus, 1991).

What was discovered in this study was that it was difficult to determine just how susceptible workers were to losing their jobs because of defense cuts when companies produced for both the military and the private sector. In such a case the likelihood that workers would not be laid off at all increased since they could still work on civilian products (Gohrband and Gordus, 1991). This was a case of diversity in production being a significant benefit to the rank and file workers.

People who worked in occupations that were geared specifically towards military production would have seemed to have been more likely to have lost their jobs in the event of defense cuts, and those occupations would have experienced an excess labor supply. But the study found that where layoffs could be attributed to the defense cuts, employees were usually laid off according to seniority as opposed to being laid off by occupation.⁸ Because of their presumed adaptability, workers with advanced skills were more likely to be retained. Since companies that produced both civilian and military goods tended to use the same workers for both, it was not easy to determine exactly which employees were actually dependent on defense spending or which occupation was impacted most (Gohrband and Gordus, 1991).⁹

For Michigan, the worst case scenario would have been for there to be cutbacks in the defense sector and significant cutbacks in other major industries at the same time. In that instance the military job losses would not have as big of an impact as, for example, the auto industry. (Gohrband and Gordus, 1991). While the military does contribute a large share to its economy, the state would not become economically crippled even if it received very little defense dollars. Certain parts of the state would, of course, suffer more than others with large defense cuts and employment in those geographic areas and among those firms that depend most on defense production would suffer the most.

If layoffs became necessary in the Michigan defense industry, collective bargaining agreements would be the workers only shield (Gohrband and Gordus, 1991). The terms and conditions in each of those agreements vary and protect some workers more than others.

⁸ "The study based the job estimates on contract actions between the Department of Defense and its contractors. The contract data are as accurate as the Government's reporting allows. It shows that, in 1983, the United States Census Bureau's 'Shipments to Federal Government Agencies' reported that 15,400 people in all occupations were employed by private manufacturing firms which shipped \$1,800 million worth of goods to the Department of Defense." (Gohrband and Gordus, p. 108).

⁹ "It was estimated that defense sector employment consists of: 28% managers of clerical workers; 16% professional and technical workers; 19% craft workers; 36% operatives, who are sometimes referred to as general production line workers or semi-skilled workers; and 1% unskilled sweepers and laborers." (Gohrband and Gordus p. 108).

Ordinarily they do not prohibit a company outright from reducing its workforce, but outlines the terms under which people can be released and the benefits to be paid to workers in the case of specific eventualities. If workers lose their jobs due to cutbacks, they can apply for Unemployment Insurance and receive some pay for up to 26 weeks (Gohrband and Gordus, 1991). Workers could keep their health insurance and pay for it themselves at reduced costs. If they have worked for the same company for at least 10 years they stand a 60-75 percent chance of receiving at least some of their pensions. One fifth of them would be eligible for supplemental unemployment benefits. Since these are considerations available to workers in most other industries, there are no special provisions in the state of Michigan for individuals laid off from defense employment (Gohrband and Gordus, 1991).

Given the short one week notice employers are required to give their workers and the fact that few benefits are available to those laid off, it would seem that there would be little chance of a worker being called back even if the defense company experienced an upturn in its economic fortunes. Collective bargaining agreements typically stipulate that those laid off be called back or given a chance to return to work if the company finds that it needs to hire more people. These workers would likely not be retained in a pool or recalled for new defense contracts. Again, they would experience the same fate as any other laid off employee in any other industry with no special consideration or programs at their disposal (Gohrband and Gordus, 1991).

If layoffs actually occur, under Title III of the federal Job Training Partnership Act (JTPA), local communities can develop and implement special adjustment programs that laid-off defense industry employees would qualify for. But few places bother to establish these programs to the degree that they would be able to serve large numbers of people. "Unless either the company, the union, or both the company and union in a joint program, join with local providers and request funds in case of large lay-offs, no programs would be available for job retraining or placement" (Gohrband and Gordus, 1991, p. 113).

Some help would probably be forthcoming if unusually large numbers of workers in defense firms were to lose their jobs. After the economic impact is felt, there would certainly be some outcry for assistance from various quarters. It is usually after the blow is felt that the communities scramble to establish jobs programs, relocation assistance, worker retraining and other help. In the best case scenario there would be more jobs available in other sectors to replace the one's lost. If workers are required to train for new jobs, results show that the outcome is not likely to be very fruitful with regards to obtaining the training. For the year 1987, for example, the U.S. General Accounting Office states that only about 6 -7 percent of eligible participants nationwide receive any training. But of those, about 69 percent are placed in new jobs (Gohrband and Gordus, 1991).

Communities have been willing to lend assistance to help defense employers obtain enough contracts to keep their workers fully employed. In some cases they have tried to get more local companies involved in defense contracting. These efforts have not been successful in Michigan. Instead, the state has found it more useful to help companies that already have contracts keep them or expand them where possible (Gohrband and Gordus, 1991).

So in Michigan, defense industry employees would receive less than a week's notification that their jobs would be terminated. They would receive Unemployment Insurance payments for 26 weeks, would have access to health benefits at their own expense at a lower than average cost, and with ten years or more of service would have about a 60-75% chance of receiving their pension. About one-fifth of the workers would receive Supplemental Unemployment Benefit payments. Beyond this, they would have been asked to compete without any special assistance with employment for civilians formerly working at military bases in an area that had a surplus of semi-skilled and unskilled workers (Gohrband and Gordus, 1991).

Massachusetts and Michigan had two decidedly different approaches to possible reductions in their sizable defense industries. Massachusetts at first sought a proactive approach to reduce the level of dependence its economy had on defense. Michigan feared that reductions

might be on the horizon and sought to find out in advance what the likely impacts would be. In moving to reduce the size of its military economy, Massachusetts encountered many obstacles from what were essentially organizations and politicians that had developed a culture of dependency on the defense expenditures. In the end, when a significant cutback did occur, the city of Quincy was not prepared. By Massachusetts failing to decrease its dependency on defense, the laid off workers experienced the full effects of the decision not to implement a plan to proceed with diversification before the cuts occurred. The Michigan study predicted workers in general would not suffer inordinately if limited defense cutbacks occurred, but those who worked only on defense projects likely would be harmed. But the state offered no special benefit to laid-off defense workers if they did lose their job. The results of the study suggested that jobs in the civilian sector would eventually replace those in the defense sector. This might well be the case over time. However, the study does not mention how long it would take for those jobs to materialize and it also does not say what happens to the communities in the meantime (Gohrband and Gordus, 1991).

The Current Role of the OEA

When we look to see how communities have handled the economic impact of decreased expenditures, the approaches discussed in *Converting the Military Industrial Economy: The Experience of Six Communities* (Hill, et al., 1991), provides good insight. They discuss the role which the Department of Defense (DoD) Office of Economic Adjustment (OEA) has played in helping certain communities recover economically from significant spending reductions or base closures.

The Office of Economic Adjustment (OEA)¹⁰ is the primary office within the Department of Defense with responsibility for providing adjustment assistance to communities, regions and states adversely impacted by significant defense program changes. It lists among those changes base expansions, closures or realignments; major contract changes that result in significant worker layoffs, and other personnel reductions and increases. The economic adjustment assistance provided by the OEA involves assessing the problem, identifying and evaluating alternative courses of action to solve the problem, identifying resource requirements and possible sources, and assisting in the preparation of the development strategy and action plan to *help communities help themselves* (emphasis added) (OEA, Feb. 2002).

The OEA has pursued a strategy of economic adjustment for communities in which it has provided assistance. Thus the OEA helps communities adjust to the impact of the DoD action after the damage to the economy has been determined or is made apparent. The OEA lists what it considers to be several success stories in its efforts to help communities adjust economically. All of the most recent episodes it discusses involve assistance it supplied to localities affected by a past round of Base Realignment and Closure (BRAC) activity. By the OEA's count they helped to convert over 100 military bases over a 25 year period, turning the old military facilities into schools, businesses, airports, housing, industrial parks, prisons and other uses (OEA, Feb. 2002). They estimate that they have helped produce a net civilian job gain from the assistance provided. The net job count, however, does not include the impact of the military personnel who were relocated elsewhere. The OEA has not become involved in conversion activities for active facilities because it believes that "traditional economic development strategies will suffice to revitalize the local economy" (Hill, Deitrick, and Markusen, 1991, p. 10).

The OEA has concentrated primarily on base closings (although they have provided some help to communities harmed by military contractor cutbacks). The work done by the OEA in

¹⁰ The OEA is a small, often beleaguered unit in DoD, whose funding has been maintained by Congress in the face of continual opposition from Republicans in the White House and top DoD management (Hill, Deitrick, and Markusen, 1991, p. 10).

Wichita in which a Boeing plant was converted to other uses is one such example of successful assistance. In that case, Boeing reduced its workforce from 35,000 to 4,200 from 1956 to 1971. Leaders in the business community developed the plan that was implemented using taxpayer funds. It included constructing the Kansas Coliseum, a new zoo with a park, an art museum, an Indian Cultural Center, and 86 miles of bike paths to attract tourists as well as improve the residents' quality of life. The work done on the site attracted other corporations impressed with the community's effort. Eventually Boeing threatened to close up shop altogether in 1976. However, by that time the city officials in Wichita had accumulated enough economic strength to waive Boeing's taxes for a twenty year period. In addition, the city helped obtain bond financing to help pay for modernizing Boeing's facilities. Boeing decided to stay (Hill, et al., 1991).

Although this type of conversion appears to have very few drawbacks, there are some pitfalls. Indeed this plan was very successful in switching from a defense dependency. An example of a "professional development model," this method relies on the ability to improve the business climate using government incentives to revitalize the community (Hill, Deitrick, and Markusen, 1991). The quality of life was improved by upgrading the infrastructure, thereby attracting new employers. But were the workers hired by the new companies the same workers released by Boeing? What became of the mechanics and others? RCA and Metropolitan Life were two of the companies that moved in to take advantage of what Wichita had to offer. The unemployment rate decreased from a high of 14% in 1971 to 3.7% in 1974, but about 20,000 people left the community after Boeing downsized (Hill, Deitrick, and Markusen, 1991). In the long run, the tax breaks offered to Boeing could end up being detrimental to the city's continued prosperity. Giving up large amounts of revenue over such an extended period of time could make it difficult for the local government to maintain the infrastructure that attracted the new industries there.¹¹

¹¹ No systematic research has been done evaluating diversification of military-dependent local economies through economic development approaches. They say that such research is badly needed, especially to

An alternative approach called the worker adjustment model of economic conversion examines the situation from the point of view of the individual (Hill, Deitrick, and Markusen, 1991). According to this method, the defense entity would be allowed to close and the government would not offer companies incentives to remain in the area. However, support would be provided to individual workers via temporary income, retraining and help in finding new jobs. The worker adjustment model supports establishing adjustment programs for workers in industries affected by military cutbacks, in a manner similar to that established for other workers similarly situated.¹² There has even been one suggestion that a type of superfund be created for defense employees who lose their jobs through draw downs or cutbacks. The GI bill and laws relating to environmental cleanup could be used as models, stipulating that companies make contributions to cover the costs of possible job losses. These funds would be used to assist workers affected to return to school with enough income support to allow them to spend an adequate amount of time to learn marketable skills (Hill, Deitrick, and Markusen, 1991). This focus on the worker is an improvement from the usual focus on the entity providing jobs. Yet this approach still reacts to what the Defense Department decides. In order to plan adequately for potential cuts, more is needed.

In 1977 the President's Economic Adjustment Committee (EAC) published a pamphlet entitled *Communities in Transition: Community Response to Reduced Defense Activity* which reported on the work of the OEA in twenty geographic areas affected by defense cutbacks. From the experiences of each of the twenty areas studied, the EAC came up with a list of ten principles that they felt were a common thread in the successful transition of the jurisdictions from military dependency to a more diversified civilian economy. *Unity* was seen as necessary to get everyone concerned pushing towards a common objective. This includes getting members of the

inform planners about the special opportunities and problems associated with government ownership of facilities (Hill, Deitrick, and Markusen, 1991).

¹² When workers lose their jobs because of actions attributable to import competition, for example, the Trade Adjustment Assistance Act provides aid in the form of income support, extended unemployment insurance, and money for training and relocation expenses (Hill, Deitrick, and Markusen, 1991).

immediate areas as well those in nearby areas involved because often the impact of defense cuts is felt throughout the region. Often a hierarchy is established, and groups are formed to define and pursue common goals. *Organization*, including informal get-togethers as well as more formal organizations with chosen leaders provides local direction. Having a *plan* allows the communities to work more efficiently. Dedicated *leadership* provides for the actions taken at the grass-roots level. Obtaining *advice* from knowledgeable professionals who have dealt with similar situations saves a lot of wasted steps. They should be willing to engage in the *acquisition* of their own resources to supplement whatever they are able to obtain from the federal government. Potential industries consider *Development* more attractive than raw resources, especially when that development is tailored to suit a particular sector. *Promotion* of what the area has to offer is necessary to attract new employers. Good *management* of the neighborhood resources and development efforts helps in the quest for prosperity over the long haul. Being able to engage in *reflection* after decisions have been carried out is a good way to learn for the future (OMB, 1977).

With some changes in its philosophy and a modified congressional charter the OEA can evolve into an agency that provides assistance to localities determined to implement a diversification plan. It already has the foundation and knowledge from working with defense dependent communities and would only need to be given a clear mission for it to adapt its efforts to diversifying local economies.

The Nature of Defense Spending

Taxpayers' money budgeted for and spent by the Pentagon has several different economic implications. The September 11th terrorist attacks have put off some difficult choices that the Pentagon must make, particularly as it relates to whether it will chose to cut back on the

number of personnel in the military by getting rid of some army divisions or air craft carriers, or eliminate some weapons programs. At the very least it will have to close some military bases. Suddenly some of those decisions have been put on hold. But there is little doubt that at some point there will still be cutbacks in programs and there will be communities of people who will be negatively impacted (Economist, 2002). Posturing is beginning for the round of base closures set to go forward in 2005. Even when defense spending is steady some defense dependent communities still lose out. When the Pentagon chooses one supplier over another or one weapons program over another, the town not chosen often has to resort to at least temporary lay offs. This has been accepted as part of the cyclical nature of defense, which has direct implications for defense dependent economies. This section will reveal some of the relationships between defense spending and its effects on the economy, including jobs and capital investments. By introducing these relationships one can better understand the assertion that directing defense dollars into diversification can be a profitable long term investment that will benefit the community and the nation's economy.

In *Swords into Plowshares: Converting to a Peace Economy*, Michael Renner states that military spending has been used as an ideal program for creating jobs (Renner, 1990). Yet, we can observe the activities currently taking place with our military and see that defense spending, and thus employment in a defense related industry, is based largely upon our foreign relations. Renner points out how jobs in the military industry almost doubled between 1976 and 1987, rising to 3.4 million employees nationwide. That amount represented the most during any postwar period except the Korean conflict (Renner, 1990). It was the pressure to balance the nation's budget, along with the easing of tensions after the Cold War that finally compelled a decrease from those high levels.

With today's more complex weapons, more of the investment in defense is going towards developing new technology as opposed to hiring more workers and enlisting more personnel to construct and operate the weapons. As the defense industry becomes more capital intensive,

fewer jobs will be created with the money spent (Renner, 1990).

From an economic viewpoint the question is: given of the current spending to "combat terrorism" is how many jobs will be created as a result of the extra tens of billions of dollars invested. What will be the net economic return on that investment?

Per dollar spent, money invested in the private sector creates more jobs than money spent on defense since private sector enterprises do not demand as much capital. According to the United States Bureau of Labor Statistics, \$.85 of each dollar invested in education and health care goes to job creation, compared with \$.34 when it comes to defense contracting. If \$1 billion dollars (in 1989 dollars) is spent on producing a guided missile it will, theoretically, make around 12,100 jobs. Spending that same amount on military aircraft would make about 18,800 jobs. However, if we were to spend that same \$1 billion dollars on pollution control equipment it would provide an estimated 22,200 jobs. If spent on local transit it would produce 28,900 jobs. If spent on educational services it would produce about 84,700 jobs (Renner, 1990).

These calculations do consider that the amount of capital required can be very different in the defense sector than in the private sector. The ability to create jobs by changing from defense production to private sector enterprises would be influenced to a large extent by the types of industries developed with the money not spent on defense. From the communities' point of view, they would be interested in knowing whether their laid off defense employees could transition into the new jobs that are developed. If there is not a skills match between the defense job lost and the private sector job created, then the displaced workers will still have little chance of being placed without being retrained. The example Renner offers is that if money is somehow transferred from producing weapons to improving health care, that change will significantly benefit those in the medical field but will be a detriment to electrical engineers (Renner, 1990). Therefore, electrical engineers might have to go outside of the community to find work. Even with retraining, there will be some skills used in defense production that will find no counterpart in the private sector (Renner, 1990).

In *Making Peace Possible: The Promise of Economic Conversion* (Dumas and Thee, ed.),

Lisa R. Peattie suggests that spending on the military can be understood in terms of an economic dichotomy. Capital invested in the military makes large defense contractors better off while making everyone else worse off economically (Peattie, 1989). Achieving the greatest economic benefit, would require that those prospering most from defense spending sacrifice their current benefits for the good of the long term health of the economy as a whole. Those who would benefit most from decreased spending on the military have less influence to exert on slowing the flow of dollars towards defense (Peattie, 1989).

The links government defense spending has with politics and industry helps build a barrier to changing the economics of the "system" (Peattie, 1989). This system then produces surpluses that are placed at the disposal of corporate executives, bureaucrats, and politicians. At a point, these institutions do not have to answer to the public, and they are allowed to make decisions without the need to take into consideration what's good for the people generally or the interests of the communities. In fact, the needs of the people might conflict with what the system wants. For example, while communities might want to try to upgrade their quality of life, the system might be more concerned with projecting an improved standard of living (Peattie, 1989). There can be instances also where it would be logical for a particular community to obtain some benefit, but the system directs the benefit elsewhere.

By absorbing so much of the resources of the nation, including capital, innovative capacities, human skills, and raw materials, the military detracts from the social and economic wellbeing of the country and slows the energy of capitalism by reducing competition and lowering the levels of competence (Peattie, 1989). "There is thus a growing cleavage between society at large whose vitality and viability are being drained by the military and those increasingly parasitic state bureaucracies and private corporations which profit from the perpetuation *ad infinitum* of the military machine" (Peattie, 1989, p. 42). She continues:

Although it is usually included in the national product, it does not provide socially useful goods or services, neither has it any capacity to raise levels of consumption. On the contrary, in countries with a developed arms industry, it absorbs a large proportion of capital, raw materials and highly qualified human resources, all of which are vital to the civilian economy and the satisfaction of social needs. It is thus a drain of the economy, rather than an asset, competing with the civilian sector and interfering with its development. However, since it is crucially located at the power center of society, the arms industry is a privileged part of the economy. It commands strong political support from governments and is well shielded by vested socio-political interests. As a rule, it enjoys priority treatment by the authorities, both in sustaining production and in the allocation of resources. So it has a profound influence on the state of the market for goods and services (Peattie, 1989, p. 56).

The defense industry also impacts the economy negatively because it tends to produce fewer jobs. Money invested in the defense industry provides a lower return in terms of the number of people employed versus dollars spent. The dollars spent on defense reduces the amount of dollars available for private investments. Defense spending promotes redundancy by constantly seeking newer and more sophisticated technology. That preoccupation with possessing the latest technology leads to job losses as that same technology reduces the number of employees (such as machinists) required to produce, maintain, and operate the end products (Peattie, 1989).

However, some would argue that the effects of defense spending on the economy are not so clear. According to Derek Braddon there is much evidence to suggest that the extent of the perceived difference in the macroeconomic impact between defense spending and other forms of public spending is not as great as we have been led to think. In *Exploding the Myth?: The Peace Dividend, Regions and Market Adjustment*, Braddon states that the evidence available does not settle the debate in favor of any argument. He suggests that more observers are adopting the position that defense spending has neither a positive nor negative effect on the economy. Additionally, such spending does not cause a disproportionate amount of inflation; has no proven relationship to productive capacity and technology development; and does not create any more or less jobs for the amount of money invested. Braddon conceded, however, that defense spending

does tend to have a more significant impact on particular regions, industrial sectors, and certain occupations in the labor market (Braddon, 2000).

Military spending has been blamed for absorbing a lot of the country's scientist and engineers and employing them in an industry that is not geared to producing a profit that can be added to the GNP. However, it can also be argued that the positive contributions of the defense industry in the areas of high technology provide some amount of economic gains. Also, the development and advancement of that high technology is itself a significant economic contribution (Braddon, 2000). But while there are some positive economic aspects to military spending there also seems to be plenty of room to improve upon the return on the significant national investment. Helping diversify communities that are dependent on those dollars is a start.

The Advantages and Relevancy of Economic Diversification

If a community can be economically devastated by the loss of a single employer, then it is reasonable to suggest that a more diversified economic base would make a community less likely to face severe economic downturns. Thus, there are advantages to be gained from not having to rely on only one major industry. Maintaining or achieving economic stability or preventing precipitous economic decline is a goal of every level of government. A declining economy precipitated by cuts in defense spending is an issue that has had to be addressed in communities throughout the world. The inconsistencies in the defense budgets over the years have made economic stability an especially difficult objective to achieve in some localities. The level of stability each area attains depends in large measure on that area's ability to adapt to the changes.

In a study conducted by the Commission of the European Communities (CEC) and produced in a document entitled *The Economic and Social Impact of Reductions in Defence Spending and Military Forces on the Regions of the Community*, the CEC discusses short term

employment losses as being one of the regional impacts of defense cuts. But there is also what they term the multiplier effects of these cuts that can have a much more wide spread impact. This includes the direct job losses resulting from the expenditure cuts plus any indirect job losses that occur. The responses to these losses are likely to be reactions to address the short term and medium term problems and some sort of policy developed to deal with the specific problem in the long term. However, it is important to assess the adaptive capacity of an area in order to obtain a clear idea of the true impacts of spending cuts (CEC, 1992).

Military spending cuts tend to have their biggest impact at the local level since individuals and communities, unlike most industries, are not perfectly mobile. In addition, while military bases are spread throughout the nation, defense firms tend to congregate in clusters in specific geographic areas of the country for economic and other reasons (Markusen and Oden, 1995).

The unemployment rate over a geographic region is a measure of the local employment environment and is also influenced by the employment conditions throughout the country. The local rate is also influenced by local actions such as plant shutdowns or increased investment, how well local policy works, or how and where employers decide to locate. An area's ability to adapt requires that it assess its economic structure in relation to the national economy and the structure of its employment base. This demands that measures other than employment results alone be used to make the assessment (Markusen and Oden, 1995). The measures to be considered often vary with geographic location.

Frequently rural areas are not as capable of adapting economically as metropolitan areas, and even among different rural areas some are more able to adapt than others. Communities in areas with declining industries may be less able to adapt than communities in fast growing areas. Policies promoted to increase adaptive capacity in order to combat defense cuts should be flexible to allow for changes in the nature of the broader economic structure. (Markusen and Oden, 1995). Areas should avoid becoming locked into policies or agreements that might not serve the

population well over time.

Other alternatives to addressing defense cutbacks include using military bases as a tool of economic development by relocating a base from a region with a diverse economy to an area with a struggling economy. This would assume that the relocation would not impair the military's ability to carry out its mission. For example, moving a base out of an urban area with low unemployment and slight dependence on the economic benefits provided by the base and relocating the base in a rural area with high unemployment and low adaptive capacity might work to improve the overall economy (Markusen and Oden, 1995). Of course this type of relocation effort would have to work its way through the many objections surely to come from those who have a stake in retaining the base in its original location for their own economic, political or other reasons not entirely relevant to the broader community. This type of base relocation would also make the economy at the new location more defense-dependent.

The United States has had to deal with adjustments related to defense cuts and base closures more than any other country. In fact the OEA was established specifically for that purpose in 1961. But the OEA currently does not do advanced comprehensive planning to head off the economic consequences of defense spending reductions prior to cuts actually taking place. The OEA reacts to the economic fallout in each community individually as the impact is felt full force. For undetermined reasons it has even expressed opposition to such advanced planning in the past. "Rather than weaning communities from dependence on military spending, during the eighties the OEA actually encouraged them to seek Pentagon procurement dollars" (Renner, 1990, p. 44). Changing their policy to include an element of advanced planning would not only benefit the communities affected, it would also be in line with what many experts on the subject claim to be the prevailing view of the public.

In *Investing the Peace Dividend: A Conversion Policy that Works*, Ann Markusen and Michael Oden assert that there is "strong public opinion" in support of spending on other items of national interest (Markusen and Oden, 1995). Nationwide opinion polls suggest that currently

“homeland security” ranks high on the majority of U.S. residents’ concerns. This stems largely from the revelations about our vulnerability to terrorism. Whenever people in the nation feel a direct threat to the security of the country, the focus returns to arming the military. However, this sentiment tends to fade over time as people come to adjust to the idea of imperfect protection. At that point communities typically elevate their desires to see the government address other priorities. The residents of the states want to be protected and to feel secure, but they also want efficiency in government.

If money is diverted from investments in pure defense so that there will be more funds available for other areas of the budget, it would certainly help to have a comprehensive plan in place to show how spending in these other areas will meet the popular needs and priorities of the public. Markusen and Oden suggest that the country mobilize for peace the way it has mobilized for war. The aim of that peace mobilization would efficiently shift some defense spending to civilian spending, and to provide a more stable economic environment for defense contractors, defense employees and communities heavily dependent on defense dollars. Any policy to divert funds from the military for the purpose of improving the economy would need to have a direct relation to producing jobs in sectors and activities that reflect the public interest and the needs of the nation (Markusen and Oden, 1995).

Adopting a policy to commit some defense spending for economic development might be a tough sell politically. One reason it would be difficult is that there is no guarantee that such a policy would be successful in accomplishing its objectives. Policy makers generally shy away from long term risks (Paukert and Richards, 1991). The defense budget offers politicians plenty of opportunities to dish out “pork” to their constituents. Often, a community will receive this pork from a senator or congressman for some reason not related to real defense needs. This money is often given, ostensibly, to stimulate the local economy. But, investing this money in private enterprises might be much more effective in achieving that goal (Paukert and Richards, 1991).

There is little doubt that spending on defense creates jobs, both directly and, through the multiplier effect, indirectly. Government spending in other areas, however, may create more employment in both the short term and especially in the long term (Paukert and Richards, 1991). As has been stated, the Defense Department spends a large part of its budget on high technology and other capital intensive areas. As a result, the number of jobs created per dollar spent tends to be low. If funds can be obtained from the Defense Department's OEA (or possibly some other agency) to assist communities in diversifying and adjusting their economies, this money should be considered an investment. This investment would eventually allow these communities to be more self-sufficient. The threats of widespread unemployment would be reduced. The outlook for the local economies once heavily dependent on defense spending would be significantly improved.

Research on the consequences of shifting public policies is a common element and a significant part of the literature in such subjects as economics, sociology and political science (Gohrband and Gordus, 1991). Professionals interested in the topic include those in the disciplines of administrative studies and urban and regional planning. Making the decision to invest federal dollars into community development based on the community's relationship to the defense sector will call for input from many other sectors of society. As we have seen in policy decisions that dealt with whether to impose or revoke various regulations related to the environment or health care, as well as policies that have affected the economy in significant ways, they were thoroughly debated at the local, state and national level (Gohrband and Gordus, 1991).

In addition to some of the sources included in this literature review, studies on this topic take place in political science, economics, and sociology. There is literature that argues that investing in other than defense related enterprises is more socially beneficial from an economic viewpoint because defense investment simply uses up too many resources. Articles on the topic have appeared in the *Journal of Conflict Resolution*. Local and national impact studies have been

included in several North American Journals. The tone of these writings has been that significant reductions in defense spending have negative impacts on local defense dependent economies. These negative impacts are compounded in a short time because of the multiplier effects of the defense economy (Gohrband and Gordus, 1991). Loss of the industry means less money flowing into the community and fewer jobs, which means a loss of buying power and perhaps more dependency on public funds. This affects other local businesses and tax revenue.

Conclusion

There are historical precedents for the federal government providing economic development assistance to local areas. An evolving economy along with shifting political concerns caused some defense oriented industries to consider converting to producing civilian products. With the rapidly declining income of defense corporations, the federal government stepped in to help them by ensuring that the defense companies would not suffer from the decreased spending. Historically, there have been few efforts of this type to understand the impacts of defense cuts on communities or to prepare communities in advance of such cuts. As some localities have found, communities cannot depend on a continuous and indefinite flow of defense dollars. Cuts at some point are almost inevitable, such as the new round of base closures scheduled for 2005. Communities should move away from a culture that has nurtured a dependency on the military industry and on military base funding.

When jobs are cut, the fate of the laid-off workers sometimes depends on their geographic location or type of employment. Blue-collar workers in rural areas have fared worst. As the military economy shifts towards more capital intensive and high tech production, the results are that even more money is being spent to employ even fewer people, and very few new blue-collar jobs are being created. This type of investment contributes to expanding the income gap that exists in America. Investing in diversification is one way for the Defense Department to

counter the uneven effects that are created by the shift in its spending patterns. Communities can help establish industries that would employ those who would otherwise be left out in a defense dependent economy geared more towards ultra high tech service and production.

Since the private sector provides a much better return on investment per dollar spent, some defense funds should be used to diversify the economies of defense dependent communities. Localities near military bases can be the beneficiaries of this redirected funding. To increase their opportunity for successfully diversifying, each locality needs to have a clear understanding of what lies ahead. While cognizant of the potential impact to their hometowns if they simply maintain the status quo, each area can proceed through the economic development process with clarity, having measurable future objectives in mind.

We should make efforts to ensure that communities are not allowed to disappear since existing neighborhoods have established social and other institutions that cannot simply be transferred to another location. Some funds that would otherwise be spent on the military should be used for this task. By absorbing so much of the resources of the nation, including capital, innovative capacities, human skills, and raw materials, the military detracts from the social and economic wellbeing of the country. If money is somehow transferred from producing and using weapons to expanding the economic base of dependent towns, the return on investment will be greater and everyone will benefit. As the situation now stands, capital invested in the military makes large defense contractors better off but makes everyone else worse off economically by reducing the amount of dollars available for private investments.

Chapter Three

THE IMPACT OF DEFENSE CUTS ON COMMUNITIES

Before developing means and methods of weaning communities from their dependency on defense spending, we will first look at what it is about this dependency that warrants attention. What have been the effects on defense dependent communities when that spending decreased significantly? To understand the impacts of defense spending reductions it helps to have some understanding of the dynamics that exist between a military base and the surrounding area.

As far as communities are concerned, the most immediate consequence of defense cuts is the loss of jobs – employment and income. The consequences are quickly spread as a result of multiplier effects. The size of a military installation bears a direct correlation to the economics of the local community. The multiplier effect is strongly influenced by the amount of goods and services purchased from the local area for base consumption for functions such as dining, exchanges, commissaries, and construction, and by the amount military and civilian personnel spend off base in local neighborhoods. Reductions that occur in the defense sector will affect both of these elements. The types of jobs held by the personnel involved in any cutbacks will help determine the total social and economic impact on the community (CEC, 1992).

A parallel exists between the effects of defense expenditures on economic growth and its effects on employment (Paukert and Richards, 1991). There are some circumstances under which defense spending will produce more jobs, both directly and indirectly. For example, expenditures on the military helped alleviate the widespread joblessness of the 1930s. There is no doubt that

defense cuts would result in a loss of jobs. The size and duration of the unemployment would determine the true impact of the cuts on the local community.

In 1991, approximately when the most recent widespread defense draw-downs started, about 6 million people were employed directly or indirectly in the defense industry throughout the country. About 2 million of them were actually on active duty in the military and 2.9 million were civilians working for defense contractors or suppliers. With every contraction of the defense budget, employees, contractors, bases, and base commands must examine their budgets to see how they will be affected. With regards to cutbacks, employees and their communities are most concerned with the prospect of job losses. When the overall economy is also weak and re-employment possibilities are very limited the concern for jobs is more pronounced. But even when the nation's economy is strong, job losses concentrated in certain areas can have harsh effects (U.S. Congress, 2002).

We generally describe the size of a base in terms of the number of people it employs. However, the economic impact might be more accurately measured in terms of the amount of money generated by the base and all of its activities (CEC, 1992). With the exception of the uniformed service members, most base employees are hired from the labor market of the surrounding community.¹³ In many communities, working on a military installation is highly sought after employment that provides some of the best jobs and the highest wages/salaries and best benefits in the area. Some communities have become very dependent on these military based jobs for their economic wellbeing. Defense dependence is a term used here to indicate that a community's share of income and revenue is tied so closely to the defense industry that the community would experience severe economic difficulties or possible economic collapse without it.

¹³ A military base ordinarily has four types of employees. First, there are the members of the uniformed services. Second, there are the Department of Defense civilian employees. Third, there are other civilian employees who work on the bases full time for a private enterprise. And fourth, there are contractors who work at the base under specific contracts.

Once a community is hit with cutbacks, it seeks to react and adapt. The state or national government frequently intervenes to offer some type of aid. With this in mind, our model of how to preempt the severe economic downturn will include an analysis of the impact of possible defense cuts. Predictably, communities with a high capacity to adapt to the change tend to fair much better in dealing with reduced spending.

The model formulated, however, will not be intended only for communities with low adaptive capacity. Distinguishing between "long term strategic regional policy" and shorter term policy helps reveal the two areas on which the model will focus. The former seeks to improve an area's adaptive capacity to make it more competitive in the long run while the latter is a reaction to a specific regional problem or a sudden unexpected and significant economic impact (CEC, 1992). To be considered successful, any program would have to address both the long term and the short term concerns.

Again, whenever we look at the impacts of cuts we must also consider the multiplier effect. We have to consider the indirect jobs and income associated with defense spending that will be affected. The total multiplier effect will depend on the particular community and on just how much it absorbs from the base. If the base has only a small reliance on the locals for goods and services then the effect will be small (CEC, 1992).

Most statewide economies are not highly dependent on defense expenditures. When the U.S. economy as a whole has a strong growth rate, most local communities would probably not be significantly impacted by cuts either. However, some areas might be significantly affected. Localities such as Groton, Connecticut, Bath, Maine, or Newport News, Virginia rely very heavily on defense spending to support their economies (U.S. Congress, 1992). If a base was to closed or substantial numbers of defense contracts were lost in either of these areas, there would be serious detrimental consequences to the surrounding communities. Therefore, any model for diversification would be targeted towards these types of communities. For areas where defense comprises a great percentage of the local economy, diversification should be urged. Not just

small towns, but some large cities or sections of cities might also fall into this category. For example, the St. Louis economy was at one time heavily dependent upon defense dollars. Also, Boston could experience some difficulties if its defense industries were to close.

Rather than identifying each and every community in the country that might be most likely to be heavily impacted by cuts, factors will be identified here that tend to put localities at risk. Of course the primary factor is a large dependence on defense spending. The more a community depends on defense dollars to prop up its economy the more likely it is that that community will suffer in the event of cutbacks. In absolute numbers, large cities will suffer a greater impact than rural areas. But rural areas are more likely to be less diversified and therefore less able to absorb the impact. The overall health of the national economy in general is another factor. When the national economy is strong, there tend to be fewer moves to reduce defense spending. A weak economy, however, makes it more difficult for dependent areas to recover or to attract other industries. The primary factors decreasing a community's vulnerability to defense cuts is a diversified local economy and a healthy national economy (U.S. Congress, 1992).

Whatever effects the cuts have on communities can be mitigated by the communities being notified far in advance of proposed reductions. When decreases take effect in large cities they generally have less adverse influences upon local communities, since metropolitan areas can spread the loss over a wide region and among more people. Some would suggest that defense cuts in metropolitan areas might have a positive impact on the economy by slowing an economy growing too fast and discouraging immigration into the area (U.S. Congress, 1992). Business costs will likely decrease and housing costs would go down, promoting economic stability.

Defense cuts can result in individuals and families in some communities having to leave the area. Depending on their size and location, more dislocations could result from closing a defense production or manufacturing facility, such as Lockheed Martin, than from closing a military base, although both would cause considerable displacements. The gross employment impact on the local community would be less because the military members on the base would be

sent elsewhere and would not count against the newly unemployed (U.S. Congress, 1992).

Again, depending on the geographic location of the base, the overall impact on the local economy will vary.

The extreme in defense spending reductions is when a base or a military production facility is closed altogether. When bases are closed they can be put to use for the communities to create new jobs. But this can consume a tremendous amount of time and take a lot of coordination, even after a decision is made with regards to what to do with the sites. Changing the base to other uses can be slowed even further because some military sites are very contaminated with pollution or have some other environmental issues that have to be addressed. Some military production facilities can be converted to other uses if a suitable tenant can be found. But conversion can be time consuming and expensive as well as speculative.

When cuts occur, there can be some assistance from existing federal, state, and local economic recovery programs. But even with this assistance, many communities will feel a strain on their economy from an increase in unemployment and displaced workers and a decreasing tax base. Also, there are limits to what economic recovery programs can do to improve the situation after the fact. Some have funding limitations, some have policy limitations, some support strategies that may not be suitable to situations in certain communities. Currently, there are no federal programs that are funded to the level that would permit them to provide significant assistance. In fact, federal expenditures decreased by 60 to 90 percent from 1978 to 1991. Even with the \$50 million appropriation in 1991 the amount designated to help neighborhoods recover was less than in the 1970s (U.S. Congress, 1992). If there is any drawdown of any appreciable size, government funding to help communities cope with the impacts will probably be very difficult to come by. The Office of Economic Adjustment (OEA) as it is currently constituted can provide limited technical assistance and some grants for economic development plans, but presently that's as much help as the OEA can give. A more difficult task is implementing a plan in a way that will actually produce positive economic advances. The Economic Development

Administration (EDA) can provide some financial assistance under Title IX, but these funds are very limited and their policies are inflexible. Additionally, communities sometimes are forced to wait a considerable amount of time before grant applications are approved. Localities are therefore unable to attack their economic problems immediately (Department of Commerce, Feb 2002). Communities would be in a better position if they are able to generate their own new jobs in the private sector to take up the slack of the defense cuts.

As the federal programs have come to be funded at lower and lower levels, and have thereby become less effective, the responsibility for improving local economies hurt by defense cuts has fallen on the states and localities. Some states and communities have been creative in planning and implementing economic development programs and strategies, using financial assistance for businesses, and helping develop or provide technology, management training, and other programs. Yet, even with this additional help at the state and local level, more federal support is still needed. For one thing, some states and localities do very little to overcome the effects of defense cuts, and much less to prepare for them in advance. Some areas lack the funding to do so because of their own monetary problems, and some do not see that "cleaning up" after the federal government is their responsibility. At any rate, the residents and the community in general suffers in the end.

Often when communities make an effort to overcome defense cuts, they resort to attempts to lure industries from other localities. Everyone concerned realizes that bringing in an industry that is already established in another area is a zero-sum effort, but often those seeking to generate jobs and revenue seem to be able to come up with few other viable alternatives. Several competing groups end up offering subsidies and tax breaks to entice an industry to choose one area over others, with poorer jurisdictions sometimes competing with more prosperous towns. These communities tend to ignore the effects that investments in improvements to infrastructure and education can have on making their areas more attractive to potential employers.

As local economic development efforts concentrate on short term financial incentives, they also ignore actions that can be taken to help manufacturing and technical sectors produce new products and find new markets. Although they have an immediate benefit to the firms receiving them, incentives will only go so far in strengthening the overall economy. They do nothing to improve the competitiveness of the companies.

The drawbacks of relying primarily on giving financial incentives to entice companies to move in are becoming more apparent to some states and local governments. Some areas have begun to offer more industrial and technical oriented services, including training, product innovation, and marketing. It is becoming more commonplace for local governments to seek the services of economic development experts or private organizations to help coordinate their development efforts, while some use business organizations to help devise their plans. More jurisdictions are gravitating towards the "one-stop shopping" concept, believing it is much more efficient to have one source or location to turn to for whatever economic assistance is available, rather than a separate program for different needs. These jurisdictions also believe it is important to tailor the economic development programs to the types of businesses that are basic to the local economy, have a high multiplier effect, and attract money from outside of the community. For instance, mom and pop stores would not be as attractive as a service enterprise that brings in revenue from outside the local area. Most federal programs have had limited success in helping in these interest areas. Money that is available for development should be spent on services to industries, such as helping them connect to a wider potential customer base, instead of subsidies to recruit companies or to decrease a company's business expenses. Even if all of these efforts are relatively successful, they will still have a difficult time bringing back an economy severely damaged by cutbacks (Catalog of Federal Domestic Assistance, Feb 2002).

By studying specific communities we can develop an understanding of exactly what the impact of defense spending can be. There are numerous examples throughout the country of localities having to react to changes in defense spending. The economic impacts of budget cuts

have ranged from mild in some cases to overwhelming in others. The history of Fort Hood, Texas provides an excellent example of what a significant influence defense spending can have on a geographic area. From the brief historical sketch that follows, we can see that not only were the economic fortunes of the surrounding area dependent upon defense spending, but many of the social and physical aspects of the area were also greatly influenced by military dollars.

Fort Hood is an extremely large U.S. Army base with about 43,000 active duty military people stationed there. The community next door, Killeen, Texas, has seen its fortunes rise and fall with increases and decreases in the defense budget. Nearby Carswell Air Force Base was a fully functioning facility before it closed in the early 1990s and turned over part of its facilities to General Dynamics Corporation (Texas Overview, March 2002).

With the exception of having the Fort Hood Base as its eastern border, Killeen is pretty much typical of many towns:

Most of the soldiers, men and women, are married and live off base with families in working-class subdivisions. Their neighborhoods look different from the rest of America only in that the people are thoroughly integrated by race. Like other military towns, Killeen has its seedy highway strip of tattoo parlors and Saturday night bust-out bars, interspersed with numerous pawn shops. Personal debt is a big problem for many soldiers. The post provides regular counseling on managing money (Greider, 1998).

What was then Camp Hood was established in 1942 as an Army training base that helped turn out soldiers to participate in World War II. At that time thousands of construction workers and their families moved into the area along with the soldiers. With the huge amounts being spent on defense, Killeen developed into a military boomtown, even experiencing a severe shortage of housing (Leffler, 1988).

Since the size of the base was so extensive, the entire economy of the area changed as a result of the decision to locate the base near Killeen. About 300 farms and ranches were forced to close down because of the base, precipitating the end of the town's cotton gin business and most of the town's other farm related businesses. Quick to sprout up were businesses targeting the

base and its personnel as the primary customers. From that point on the prosperity of Killeen would be closely linked to the fate of the military base. The size of the military operation at the base determined whether Killeen experienced a boom or a bust in its economy: when the base grew Killeen prospered; when the base downsized the town experienced tremendous difficulties. For instance, the town experienced a deep recession after World War II when Camp Hood lost most of its troops upon the conclusion of the war. Then, when Fort Hood was designated as a permanent army base in 1950 the boom times returned. The population of the town grew from 1,300 in 1949 to 7,045 in 1950. Between 1950 and 1951, construction was completed on more than ninety-five new permanent commercial buildings in the town (Leffler, 1988).

In 1955 the town of Killeen had about 21,076 residents and 224 businesses. With the base becoming a permanent facility and the boom that followed, this rapid growth caused a major strain on local infrastructure. There was an ever increasing need for new schools, hospitals, water and sewage facilities, police and firemen, and an improved transportation network. In 1955 the city of Killeen responded by devising a master plan that would satisfy the requirements for the city's needs and ambitions. However, in the mid-1950s there was a reduction in the number of troops stationed at the base and another recession followed, lasting until 1959. In that year, an armored division was assigned to Fort Hood as a permanent tenant command. By 1960 Killeen grew to about 23,377 residents with 275 businesses. That growth continued through the 1960s with significant increases as a result of the Vietnam War. In 1970 Killeen had a population of 35,507 and had opened an airport, a library, and a junior college (Central Texas College) (Leffler, 1988).

This cycle of booms and busts went on into the 1990s. Even though Fort Hood has experienced less dramatic spending cuts and the loss of some units, the city has continued to grow. The 1980 census indicated that Killeen had a population of 49,307. Finally, the city's leadership decided to try to build another industry in the city. Late in the 1980s Killeen began to advertise its attractive natural surroundings as a tourist destination and attempted to refine its

image as a military town, with mixed success. By 1990 the population was 63,535 with a total Killeen metropolitan area population of 255,301. Not only did the military presence redefine the city's economic outlook, it also changed the racial composition of the city, as well as its religious and ethnic makeup. In 1950 no African-Americans lived in the city, for example, but within just a few years the segregated subdivision of Marlboro Heights was built. In 1956 the school board voted to integrate its high school. The first Catholic parish was established in 1954, while Presbyterian and Episcopal churches were also built during that time. In the 1980s the city boasted of a heterogeneous population including European-American, African-American, Mexican-American, Asian-American, and many foreign nationals (Leffler, 1988).

Today, with Fort Hood continuing to serve as its economic base, Killeen is attempting to exploit its potential for business development. According to the city's Chamber of Commerce website, retail trade has "mushroomed" and the town regularly sets records in construction, sales tax rebates and bank deposits. The Chamber attributes this growth to an "inexhaustible labor supply," the source of which is Fort Hood. Between 800 and 1,000 soldiers leave active duty service each month. About one-third of those leaving the military decide to find jobs in the area. These soldiers and their spouses are said to provide a well-disciplined labor supply attractive to employers (Killeen Chamber of Commerce, Feb 2002).

The table below shows the types of jobs typically available in the Killeen area and the pay associated with each occupation:

Table 1: Wage Data¹⁴

Occupational Title	Entry Level	Occupational Title	Entry Level
Production Classifications:		Production Classifications:	
Accounting Clerk	\$8.70	Machine Operator	\$8.77
Admin. Assistant	\$7.56	Maintenance, Building	\$7.34
Auto Mechanic	\$12.36	Manager, Trainee	\$6.59
Bartender	\$4.64	Material Handler	\$7.00
Bookkeeper	\$8.17	Nurses Aide	\$6.69
Cashier	\$5.41	Painter	\$6.36
Carpenter	\$8.80	Plumber	\$9.25
General Clerical	\$8.18	Receptionist	\$6.43
Construction Worker	\$6.78	Sales Clerk (retail)	\$5.35

¹⁴ Source: Gkkc.com (February 2002)

Cook	\$6.63	Secretary	\$7.44
Correctional Officer	\$7.98	Security Officer	\$8.28
Customer Service Clerk	\$7.36	Telemarketer	\$6.63
Data Entry	\$7.50	Teller	\$6.47
Daycare Worker	\$5.18	Truck Driver	\$8.34
Dental Assistant	\$7.68	Waiter/Waitress	\$5.38
Electrician	\$8.95	Warehouse	\$7.63
Fast Food Worker	\$5.96	Welder, Arc & Gas	\$9.40
General Clerk	\$8.18		
Housekeeper	\$6.15		
HVAC Install/Maint/Rep.	\$7.90		

There are major disadvantages for an area when its economy is known to be dependent on the fortunes of a single entity, the prime one being that swings in the economy are more likely. When a community is known to experience sharp swings in its economy, lending institutions generally are more conservative. As a result, governments have a more difficult time raising capital for projects intended to help develop the economy. A cyclical community, such as Killeen has been over the years, develop a greater dependency on the one industry it does have and has little opportunity for diversification (Paukert and Richards, 1991). If that one industry were to leave it would be extremely difficult for the area to recover. Closing Fort Hood would cause impacts that would be felt in every business that has sprouted up as a consequence of the base being located in that area.

The closing of a military base has ignited some of the most public objections and expressions of concern of any defense spending cut strategies. The communities in which the bases are to be closed often expect total economic disaster, an expectation sometimes fed by the predictions of so-called "experts." The Rand Organization conducted a study of three communities located near large bases in California that were selected for closure in 1988. These particular communities, George Air Force Base in San Bernardino County (closed in 1992), Fort Ord in Monterey County (closed in 1994), and Castle Air Force Base in Merced County (closed in 1995), were selected because of their geographic isolation (Darden et al., 1996).

To determine the impact that these base closures had on their local communities, Rand analyzed data on changes in population, employment, and the housing market. Part of the study

included a look at what affect the closures had on school enrollments, unemployment rates, retail sales, and municipal revenues. Rand considered housing vacancy rates and the average sales price of housing units in the communities. The study compared the data on the communities before the closures with the data on the locations after the bases closed to examine each measure used.

After the study was completed, it was compared to three benchmarks: (1) the changes that various expert consultant studies had predicted would occur in each community, (2) the experience of a matched set of California bases that had not been scheduled for closure, and (3) the experience of other communities in each affected county (Darden, et al., 1996).

The Rand Organization found that some communities did suffer as a result of the base closures. They determined that in most cases the closures were not catastrophic and often the results were not as harsh as was often predicted. They found that there was a significant cost borne by displaced workers and their families as well as by local businesses. Rand points to this finding as evidence that it is the individual who bears the burden of the closure rather than the community (Darden, et al., 1996). But since it is individuals who comprise a community, it is difficult to understand their distinction.

Economic development initiatives have a better chance of succeeding if policy makers recognize the institutions that exist within a community and build upon what is already there. This realization differs from the prevailing view of the 1950s and 1960s that saw physical redevelopment as the key to reviving economically distressed areas. That view held that individuals should be moved from failing neighborhoods, which would then go out of existence, to more prosperous neighborhoods (Green, 1991). This view was countered by urban commentators such as Jane Jacobs who recognized the importance of complex social relationships within a community to the goals of community development (Jacobs, 1993). Not respecting these relationships would tend to make any type of development initiative more likely to fail.

Not only did the Rand study compare the communities' actual outcome to the predicted outcome, it also compared the economic performance to communities that the organization considered similar, but whose nearby bases remained open. Rand determined that the closures had "noticeable effects," but they were "localized" and were at least partly offset by other economic factors. (Darden et al., 1996).

Rand acknowledged that drawing conclusions from the results of a study on three bases has some inherent problems but believe their results point out that the effects of closures on local communities might not be as straightforward as they appear. Much depends on the amount of integration between the bases and their respective local community. Also, the characteristics of personnel who work on the base and the amount of efforts local residents expend to prevent negative impacts can combine to make the effects of base closures better or worse on the area. (Darden et al., 1996).

The study concluded that it is important to measure changes in the communities as they happen to be able to determine the true effects. Alternatively, the communities can depend on long-term studies of the base closure process and then take action. Of course, this path of action would do little to prevent the initial impacts of the closings since no action would be taken until the study is completed. Or, the community can take actions based on predictions and projections of the closure impacts by "experts," that Rand says lack credibility since they are done before the closure happens. Constant monitoring as the closure process occurs, they assert, is the best of the alternatives even with its shortcomings (Darden, et al., 1996).

Defense cuts have impacted other communities in different ways, including some large cities and at least one state. St. Louis experienced the impact of defense cuts when McDonnell Douglas began downsizing in 1989. Once the largest employer in the region, the company laid off almost 15,000 workers. With an extensive multiplier effect in the aircraft industry, the total job losses affected thousands of additional workers at subcontractor locations (UALR – Institute for Economic Advancement website, Jan 2002).

In the 1990s, cutbacks and base closures in the San Francisco Bay area caused a 12 percent job loss in the area. Texas lost over 35,000 defense jobs between fiscal years 1988 and 1998. In Texas, some jobs were lost as a result of military (BRAC) downsizing while others were lost because of other cost cutting or operational decisions. Nine military bases have been closed or downsized in the state since 1988 (Texas Overview website). However, actual base closures accounted for only about 7,000 of the jobs lost over the period while about 27,981 jobs were lost as a result of operational and other budget decisions (Texas Overview, Feb 2002).

Between fiscal years 1995 and 1998, defense contracts awarded to Texas businesses decreased by \$1.04 billion dollars. Looking at this impact on the broader economy (multiplier effect), the total number of jobs attributable to defense contracts dropped between fiscal years 1991 and 1996 by 19.8% or 29,000. This includes the jobs lost as a result of the closure of Carswell Air Force Base and the jobs lost by reductions at Lockheed Martin (Texas Overview, Feb 2002).

William Greider provides additional perspective into the kind of impact defense layoffs can have on an area heavily supported by defense spending. In *Fortress America: The American Military and the Consequences of Peace*, Greider discusses the impacts that layoffs at a major defense supplier can have on a town where defense work was a major employer. Lockheed Martin was contracted to produce military aircraft at a plant in Fort Worth, Texas. They were allowed the free use of facilities at Carswell Air Force Base. After the air force base closed (upon the conclusion of the Cold War), Lockheed Martin had the facility all to itself (Greider, 1998). With the base in full operation and the defense production facility located there, the economy of Fort Worth at one time mirrored the cyclic spending of the Defense Department: when the government spent heavily, Fort Worth was prosperous. When the defense budget decreased, Fort Worth felt the pinch (Greider, 1998). In 1989, when the Lockheed Martin plant (at one time operated by the General Dynamics Corporation) was in full production, the workforce totaled

over 31,000 people¹⁵ (Greider, 1998). Less than ten years after the plant had reached its peak level of employment, the number of people working at the plant had dropped below 11,000 and continued to fall. A large part of this reduction was due to the Bush administration's cancellation of the A-12 fighter that the people in Fort Worth had planned to build for the Navy. Many of the workers who were laid off or expected to be laid off had experienced this before in past down cycles. Some of those who lost their jobs were able to find jobs with various businesses in the area, but for far less pay (Greider, 1998).

The layoff process was something like the plague – no one felt bad for those laid off because they knew they would likely be next. Using a table the management called their “long-range manpower projection,” each worker knew the approximate date when he or she would be laid off if the government placed no new orders (Greider, 1998). As Greider tells it: “One worker named Howard Story is forty years old, earns eighteen dollars an hour, and knows he will easily find another job in the booming Fort Worth area, but not like the one he’s losing. ‘You can find seven- and eight-dollar jobs all day long,’ he shrugs. ‘It’s the high-level jobs you can’t get’” (Greider, 1998, p. 61).

Typically when these unionized industries have to reduce their number of employees, union negotiated agreements require that they retain the older workers with more seniority and let go of the younger workers. This practice is less pervasive among the ranks of the non-unionized workers such as engineers. The younger blue-collar worker though, such as machinists, is all but eliminated. For the foreseeable future they are not likely to return.¹⁶

¹⁵ Keep in mind this number only represents the employees on the civilian, private contractor payroll. It does not include the folks who worked on the base itself, and it does not include the military personnel stationed there (Greider, p.56).

¹⁶ Interestingly, after Lockheed Martin lost its contract to build new A-12 fighter planes for the U.S. Navy, they won contracts to build a relatively small amount of F-16s for several foreign countries. They still operate out of the government provided facility (rent free) and they sell a product that was researched and designed using U.S. taxpayer's dollars. This is a tremendous subsidy to Lockheed Martin as they are able to manufacture their goods for export and sell them at unusual profits (Oden, et al., 1994).

The impacts in Long Island, New York were felt keenly by the laid off defense workers, who had to confront a job market that offered them very little chance of obtaining employment comparable to the jobs they were displaced from in terms of labor and skill levels. The jobs that are most in demand there do not demand the types of skills or offer the types of pay the workers are used to. The occupations that normally hire workers with the former defense employees' skills are gradually being eliminated in the area. The jobs available in the area were mostly in retail sales and office support, with some jobs available in health care and education. The fact that numerous defense workers were older and had worked many years in defense tended to add to their difficulties in finding employment (Oden, et al., 1994).

The workers laid off in Long Island also had difficulty finding new jobs because of the types of occupations in which they worked. Some of the individuals worked in highly technical fields, which are not readily available outside of the defense industry there. Other than software engineers, employees in other technical occupations had a difficult time finding new employment unless they left the community. For example, there were 500 laid off engineers seeking employment while the number of obtainable engineering jobs was 140 (Oden, et al., 1994).

The outlook for blue collar workers, who accounted for the bulk of the employees, was also not good. Most of the blue collar defense workers worked in manufacturing jobs. But, the only manufacturing jobs available on Long Island were in the defense industry, which is the case in many defense dependent towns. These individuals will be required to undertake significant adjustments in their occupations, and will probably need to be taught new skills (Oden, et al., 1994).

As a percentage, engineers and scientists are more likely to be displaced as a result of defense cutbacks than they would be in other industries, like auto or steel. But it is still the blue-collar workers that lose their jobs in higher numbers. They also have a more difficult time finding new jobs than professionals. Blue-collar workers are usually unemployed for longer

periods of time and, when they do find new work, take new jobs that pay less money and have fewer benefits than their defense jobs (Hill, et al., 1991).

Jobs attract the most attention when cutbacks are initiated. Job losses are felt most at the local level. Reduced expenditures require that the effects on workers be addressed as well as effects on the economy. Where there is little probability that defense workers will find jobs in their communities if laid off, because of a lack of other employers, it seems logical that society (represented by the federal government) should invest in diversifying the economies of those areas to provide more opportunities and to make the communities themselves more viable. In the long run this would be cheaper, in economic and sociological terms, than waiting until displacement actually occurs. If it is prudent for society to pay the price for helping displaced workers and downsized companies readjust, then it should also be prudent for society to help communities diversify in order to help prevent economic this sort of economic distress.

When an area undergoes large reductions in defense expenditure, the problem is similar to when other industries are restructured, as has happened in cities such as Pittsburgh, Cleveland, and Detroit. When these cities lost their major industries, they were forced to reform their economies (in the case of Detroit, not very successfully) (Hill, et al., 1991). So, reducing the dependence on the military, whether voluntarily or out of necessity could help reform the local defense dependent economy.

Finally, one other aspect of the impact of defense cuts at the local level should be addressed. As Overbey points out, military bases exert a significant social, environmental and cultural impact on the surrounding area. The uniformed members assigned to the base become a part of the neighborhoods (Overbey, 1982). A good number of military personnel live off base in the community, attend local churches, send their children to nearby schools, and patronize local businesses. When bases are forced to either grow or reduce their size, those changes impact everything from retail inventories to church donations in the surrounding area. The Department of Defense ought to consider the full impacts of its decisions, including the social, psychological,

and physical as well as the economic consequences. The DoD should assess the human costs of job loss at the local level. Suggesting that the DoD address these considerations does not mean to also suggest that we should keep unneeded bases open, or that eliminating or downsizing facilities are out of the question, or even that defense contracts should be maintained for the economic benefit of a particular town. But, by knowing what the impact will be on the community if a base is closed or a defense facility is downsized, the federal government, the state, and the local area can anticipate the problems. If a locality is significantly dependent on the defense spending and stands to suffer greatly from cuts, then the government should be willing to offer assistance to diversify the economy.

Communities generally have no desire to be at the mercy of the federal government or of the Department of Defense when it comes to determining their economic wellbeing. Many areas have become wary of their prospects of remaining viable as long as their dependency continues. At the local level complacency is being replaced by efforts to find ways to reduce their community's vulnerability (Renner, 1990).

So, we can see that defense cuts can have profound affects at the local level. Much of the initiative for changing the economies has grown from grassroots work. Defense workers are beginning to take an interest in shaping their own fate, realizing that they can no longer depend on lifetime employment at their current jobs. (Renner, 1990). There have been a variety of plans established to counteract the job losses from the military related economy. By using the economic development diversification process, perhaps these localities can establish a development plan that will allow them to grow beyond their reliance on defense.

Chapter Four

METHODOLOGY: SETTING UP AN ECONOMIC DIVERSIFICATION DEVELOPMENT PLAN

Having reviewed a brief history of defense spending and its impacts on various communities, we can now formulate a model that localities can use to establish and implement their own diversification plans. The intent in this chapter is to develop a source from which elements can be taken when establishing a specific diversification plan. The role which the OEA would play is discussed. Ways to reduce dependence on defense spending are included. This chapter includes a discussion of the role of residents and public officials in the process. Basic approaches to economic development, including job creation, are discussed as well as tools that can be used to formulate the diversification program. This chapter also establishes the need for a legal framework and investigates methods for implementing programs. Additionally the chapter also includes coverage of some of the advantages of diversification and some of the essential elements of diversification planning. Finally, a suggested outline for a diversification development plan is presented, including some suggested programs for stimulating non-defense dependent growth in the local economy.

Economic planning and development probably has more of a direct impact on the quality of life in a community than just about any other government action. Some communities are proactive in their efforts to strengthen their local economy while others are more reactionary. With respect to communities heavily dependent on federal defense spending, the tendency has been to accept that their economic fates would rise and fall with decisions made through the

Department of Defense. When the Pentagon closes bases some communities have a very difficult time replacing the lost jobs. Although some localities fare better than others, few escape without any negative impacts.

As with the loss of any industry, a community can better overcome decreases in defense expenditures if there are other industries or jobs available for the displaced workers. Localities that have very few other alternatives to defense employment should plan now for any cuts that might happen in the future. Their economic plans should consider what the effects of mass layoffs or major decreases in the flow of revenue would be on the economy as well as on the neighborhoods and the future viability of the community. The actions they take should then be based on lessening the dependency on a single industry. The aim is not necessarily to keep each and every worker that might lose their job in defense from leaving the area, but to assure that the area as an entity remains viable regardless of decisions made elsewhere. Surely, each community might take a different approach to reducing their vulnerability, but there are some actions that could be considered essential to helping attain success. The methodology will focus on some of the more probable avenues of developing a workable solution that will make the economies less reliant on military budgets. The end result will be a diversification plan that can be used, in whole or in part, to help further that effort.

The process will focus on concepts that are primarily, though not exclusively, demand-side efforts, as opposed to supply-side efforts. Demand-side policy aims to encourage economic development through promoting small business development, business incubators, venture capital programs, and industrial parks among other endeavors. Supply-side efforts focus on tax breaks and low interest loans for any type of business as opposed to concentrating on small indigenous enterprises (Green, 1991).

Depending on the types of questions the plans are intended to address, constructing a diversification plan can be approached in a variety of ways. Regardless of how they are put together, a key point to remember is that the general plan outlined in this chapter is only a

simplification of the real process (Dunne, 1991). The actual input is based on differing assumptions as to the behavior of the economy, while the output is based on the analytical skills and knowledge of those ultimately making the decisions. In analyzing what the employment outcome will be of changes in defense expenditure, those conducting the research will need to make a number of decisions. Therefore, it is as important to know that the process can answer the questions that arise as it is to know what questions to ask (Dunne, 1991). Those formulating the plan will need to compile the information necessary and determine how to overcome any data deficiencies. They should start by becoming familiar with the current policies or policy options that will have an impact on their outcome (Dunne, 1991). Since local programs and attitudes differ, approaches will inevitably vary to some extent. Thus, it is unlikely that what works for one community will work exactly the same way in another.

To create an economic development process for diversifying defense dependent communities, the focus should be on the local economic base. Those taking the lead in these types of efforts are economic development planners, often with the assistance of government agencies and with generous input from the communities affected. The planners' objective is to diversify the community economy by replacing at least a significant portion of the economic stimulus provided by the military with other activities. Under some circumstances this might be achieved by merely using the traditional mix of economic development enticement tools of tax incentives, training assistance, and help with marketing (Hill, et al., 1991). When more is needed for a community to successfully diversify, as it likely would be in most military locations, other alternatives should be made available.

For communities located near military bases, some assistance with diversification would be made available through the OEA. In fact, some communities might be able to accomplish the necessary changes on their own, but those that cannot need other means of devising and implementing their plans such as grants and other assistance from the OEA.

As has been stated, there are many different approaches that can be tried to reduce the military dependency of the economy. If we were to concentrate on firms that produce items primarily for the military, then economic conversion would be an alternative. The firm could simply stop producing for the military and start producing goods for the private sector. All of the firm's employees would essentially keep doing the same jobs, only without the security of defense contracts to back their employment. To decrease dependency on military bases other enterprises need to be established that will account for an increased share of local economic production.

Another approach to achieving diversification is to reduce the amount spent on the military. Efforts to do this have concentrated on lobbying, education, and organizing, with citizen initiatives frequently being the rallying focus (Peattie, 1989). A similar means is to focus on the long term damage to the economy done by military spending. The damage can be exposed through education, and the business community can help develop alternatives to defense dependence that includes a broader industrial policy and economic planning (Peattie, 1989).

There are precedents for looking to the defense budget as a source for helping diversify a local economy. The Jobs with Peace Campaigns¹⁷ in various states have brought attention to their belief that spending on the military is costing communities jobs. The organization has also been influential in helping to develop new industries in communities that relied on defense dollars. In Minnesota they helped convince the state legislature to fund economic conversion projects. In Philadelphia they were instrumental in developing alternative uses for the closed navy shipyard and former hospital site. Jobs With Peace has also produced educational materials related to military spending, and they have organized citizens in cities that have been negatively impacted by cuts in social programs, which the group blames on extra defense spending (Peattie, 1989).

¹⁷ Jobs With Peace is a private organization that has as part of its objectives the goal of politically organizing the people in cities who are most disadvantaged by budget cuts in Federal Programs, and to show them the relationship between their own disadvantage and the expanding military budget (Peattie, p. 30).

Any effort to expand the local economy beyond the industries it has typically relied upon will need support from the local community, including residents, businesses, and politicians. Each community will need to determine the best way to accomplish this, but pointing out the vulnerability to which their neighborhoods and their livelihoods are exposed by the dependency can be a useful instrument. When individuals believe that there is a potential threat to their material interests they might be more inclined to get behind efforts for change. The local government could be a leader in building a coalition to proceed with diversification.

The methodology this paper focuses on is aimed at diversifying defense dependent economies by starting enterprises in, or attracting other enterprises to, the community. Part of that methodology is to obtain funding from the military budget as a source for economic development. Since the OEA is a part of the Department of Defense, at least part of the Department's expenditures are already obligated for development purposes.

Selling the community on the necessity for change requires that the residents buy into the belief that the long term viability of their towns depends on reducing dependence on a single entity – that reducing defense dependency is an idea whose time has come because of the needs for sensible economic planning. This reduction can be seen as a means of making their economy more competitive. It should be clear that the ultimate objectives are to keep the community viable and enhance its competitiveness, to reduce the vulnerability to defense spending cuts, to provide more options for employment, to stimulate economic growth and generally to improve the area's adaptive capacity. While some of these objectives might seem somewhat abstract to many residents, the need to create a wider variety of jobs is one aspect of the overall plan that nearly everyone understands.

While it is important that the community in general understand that the plan for diversification is about more than merely creating more jobs, it should also be understood that more jobs is a part of the initiative. With this realization, policy makers will have more common ground on which to build support for the entire development program.

Public officials as well as the general public are interested in jobs in the community. It is easy to see the relationship between the level of employment and the amount of revenue generated for the locality and the quality of life in the area. Jobs are related to property values and the vibrancy of businesses. There are currently programs available through agencies such as the U.S. Small Business Administration that will make loans to start new businesses. Paukert and Richards state that job creation is a common focus of economic development primarily because it is not abstract, but provides an easily measurable objective. However, problems can arise when jobs are the exclusive focus. They point out that just because one community creates a job does not necessarily mean that the job will go to someone from that same locality. Someone from another area could move in to fill the position (Paukert and Richards, 1991). But given the stated objective of ensuring a viable community, this would not be the greatest concern in our model. Current residents might be given priority, but others would also be welcome. A bigger concern would be attracting new jobs to the area that might have naturally gone to another area, because this might not result in a net increase in the number of jobs available overall (Paukert and Richards, 1991).

A better approach would be to concentrate any attempts at job creation on specific occupations and industries as opposed to random job creation (Paukert and Richards, 1991). This involves inventorying the locality to determine what skills are available in the immediate area and in surrounding areas, then bringing in or starting up companies that can utilize those skills. Yet, creating jobs is but one part of the employment equation. It is also important that communities retain the jobs that are not a part of the military economy. Firms providing such jobs should not be placed at a disadvantage by a locality's efforts to attract or start new businesses. In the final analysis one job retained is just as good as one new job created, but retention is harder to measure and does not bring as much fanfare (Paukert and Richards, 1991). The bottom line is that efforts should be made to ensure that going concerns remain in the community.

When working to bring in additional employment, it should be noted that two-thirds of

new jobs are created by companies with fewer than twenty employees.¹⁸ The optimum situation then is to attract or establish young small firms, since they tend to create more jobs whereas large firms tend to destroy at least as many jobs as they create (Green, 1991). Once jobs are created, people employed in those positions would want to have some sense of employment security. So it is important that the new companies are established on a solid foundation. One role for the federal government would be to help build these foundations and to provide other help where needed for communities to be able to formulate plans and institute policies that are likely to result in the establishment of viable new firms.

For example, once the communities attract the companies or entice groups or individuals to start up firms, the OEA can help the localities ensure that these businesses are sufficiently capitalized. Since one of the main causes of new business failure has been a lack of capital at start-up, this will give those enterprises a better chance of becoming established as a profitable entity. Another reason for targeting small businesses is that these companies tend to fit better within an approach that relies on smaller structures or is able to adapt its operations to existing facilities, such as a vacant building; larger firms generally require that new facilities be constructed. When small entrepreneurs in distressed communities start businesses they start small businesses, not large corporations. They are also more likely to obtain their labor supply from the locality, often employing workers and accepting the risk of operating in struggling neighborhoods. Large corporations are less likely to do so (Green, 1991).

Focusing on the economic improvement of communities near military bases, there are many tools that can be utilized to formulate an economic diversification program. Generally, the overall process should (1) focus on the creation of new small businesses; (2) avoid the type of complex, capital based tax incentives that appeal to large businesses; (3) recognize the requirements that must be complied with to obtain any federal funding if any will be needed; (4)

¹⁸ There is ample evidence that points to the conclusion that small firms produce and generate significantly more new jobs. David Birch of MIT conducted an extensive study of 80% of U.S. firms that concluded that two thirds of all net new jobs are created by firms with fewer than 20 employees (Green, 1991).

focus on neighborhood development, renovation and indigenous businesses (Green, 1991).

In order to be successful, the plan must be capable of being implemented. To advance from development theory to applications to real life problems, the program has to be shaped by and be in conformance with the law. As Green indicates:

It ordinarily requires statutes and regulations to create a framework for the most mundane and the most innovative programs. Legislative acts and administrative rules are a reflection not only of the desires and prejudices of the lawmakers who craft and enact them, but also of the limitations posed by certain fundamental values – such as non-discrimination, due process, and fair dealing – that are enshrined and protected by state and federal constitutions and centuries of Anglo-American common law (Green, 1991, p. 58).

Some communities might be able to develop their own diversification program within their existing legal framework. In those cases all that must be done is to ensure that implementation of the program also stays within the legal limits. For localities that would need to introduce new legislation that would allow them to proceed with their development plans, gaining that approval could be done by the established legal avenues. In cases where state laws are involved local leaders may need to petition the respective state legislature. For the OEA to expand its role from an organization that helps communities recover from defense cutbacks to one that can help a locality diversify its defense dependent economy would require an amendment to its congressional charter.

States can take action to assist diversification. In the 1990s eleven states studied the effect of military spending on their state's respective economies. Two of those states passed laws to convert their defense industries. The state of Washington established a defense diversification program through its Department of Community Development. The department's task was to take note of what was happening within the defense industry and become aware of any potential impacts those firms might have on the state's economy. They also provided technical assistance to local areas and companies that wanted to pursue diversification (Hill, et al., 1991).

Connecticut passed conversion legislation after Vietnam that has since been revived with new funding that established a program called Connecticut Innovation, Incorporated. It evolved

into a quasi-public development agency that helped defense contractors develop commercial products. Pennsylvania and Minnesota considered passing bills to establish alternative use committees that would be led by the communities and based among defense firms (Hill, et al., 1991). These are significant efforts at the state level, but state action may not always be adequate to promote the type of diversification that would have a realistic opportunity for long-range success. States might not have the financial resources needed to get certain enterprises off the ground. A regional (multi-state) or, more likely, a national initiative might then be called for.

Some policies or programs could be devised and implemented at the regional level. This might work best among states that engage in state level planning, like Florida. There are many instances where military cutbacks can have an impact over a wide geographic area. The size of the potential impact depends largely on the number of jobs that are eliminated. Job loss will provide some indication as to whether the problem is sufficient enough to warrant policies at the regional level (Commission of the European Communities (CEC), 1992).

Localities should analyze their own situations and determine whether they can best carry out a policy of diversification on their own or whether they should join with other communities and pursue broader objectives. For example, if the community or region considers that a base or a group of bases might close or reduce operations, then they would want to assess what the impact would be to the area. For some regions, having a base close or downsize might have a significant impact while other areas might be able to make a more beneficial use of a closed facility. The opportunities available in the event of a closure or reduction in operations will depend largely on the locality's ability to withstand the economic impact of that reduction. If the closure causes a substantial decrease in the employment and income levels, then the ability of the community to continue as a viable entity could be in danger (CEC, 1992). It would be ideal for new enterprises to be able to step in and keep the economy going with little noticeable impact. Where currently no other significant enterprises take up the slack, achieving this level of economic stability would take some time to accomplish.

At the national level, Congress would pass a law that would allow funding for economic diversification of defense dependent communities. This bill would perhaps be implemented for a specific number of years with the aim being to wean dependent communities from near total dependence on defense dollars. The bill could be formulated to give financial assistance, through the OEA (or the EDA, or both) to geographic areas that rely on defense spending for, say 30% or more of their economic output.

Such a bill could be fashioned after the Defense Economic Adjustment Act (H.R. 101), first offered by Representative Ted Weiss of New York in 1977. However, a diversification bill would likely not need to be as complicated as that one was, and could possibly gain approval without having to pass through the numerous congressional committees that H.R. 101 passed through. The bill produced by Weiss evolved into a model for defense industry conversion. Under it, a Defense Economic Adjustment Council was established. Along with other tasks, this council was designated to prepare guidelines for conversion and to disseminate conversion related information. The legislation called for every military base, laboratory, and production facility with more than 100 employees to establish an Alternative Use Committee as a precondition for being allowed to accept any defense contracts. The Committee was made up of management level employees as well as laborers and individuals from the local community. Every two years the committee was required to develop and review conversion plans (Renner, 1990). By requiring that the Secretary of Defense notify contractors or bases one year in advance of any changes in procurement contracts that could lead to layoffs, the bill provided an opportunity for some planning (Renner, 1990).

The bill required that defense industry employees be retrained for new jobs if they were to be laid off. Workers would also receive temporary income and relocation allowances. A nationwide job finding network would be set up. Finally, the law stipulated that any community that was "substantially or seriously affected" in a negative way as a result of the decreased spending "shall be eligible for Federal assistance for planning for economic adjustment to avoid

substantial dislocations.” An economic adjustment fund was established to pay for these initiatives that were funded by projected savings in military spending (Renner, 1990).

A law establishing a program to help defense dependent communities could be implemented in much the same manner. A “Defense Economic Diversification Council” could be established to provide guidelines for devising and implementing an economic diversification plan. This Council could become part of the current OEA, since that organization is already familiar with many of the impacts of decreased spending on communities. It could determine the qualifications that localities must meet to take part in the program. For example, the Council could determine the boundaries of the areas that are considered to be included in the defense dependent area. It could also determine what level of dependence would allow a community to qualify for federal assistance. The Council could set up committees of state and local political leaders along with local business and community leaders that would develop and review diversification plans. The Council would determine any time limits for which funds would be available. An “economic diversification fund” could be established to pay for these initiatives that can also be funded at the federal, state, and local levels.

It is necessary to have a legal framework for such a policy; however, the most critical elements of this type of initiative are the social and economic programs that are produced. Involvement by the federal, state, and local governments is crucial, but the program could become ineffective if it is too centralized, due to the likelihood of it becoming too bureaucratic and inflexible (Renner, 1990). “If the eighties have taught the world any lesson, it is that neither completely unfettered private enterprise nor rigid central planning is likely to provide useful answers to the challenges ahead. This prompts a question about the proper role of public policy: To what degree should government ‘interfere’ in the market to bring about the rather fundamental redirection of priorities needed?” (Renner, 1990, p. 80). The best approach could be to establish the overall framework and provide the incentives for businesses to produce useful products or services that can fill a demand in the market (Renner, 1990). This type of policy could be built

around an alternative research and capital investment agenda to create an initial market demand. Some examples of enterprises that could be started include nonpolluting production technologies of an appropriate scale, businesses that can help enhance renewable sources of energy or increase energy efficiency, companies that can help strengthen public transportation, provide affordable housing and health care, and enterprises that can provide educational services (Renner, 1990).

After the policy has been enacted, the actual implementation of the program should be left to each community or region, since they are better able to judge what their particular strengths and weaknesses are. The requirements for establishing a diversification program should be flexible enough to allow localities to be creative in devising solutions. The specific program each area chooses to implement should address the needs and abilities of their respective community. In devising and implementing the policies and programs, there will inevitably be some local opposition, particularly in the early stages. Since these types of programs require public initiative some amount of resistance should be expected. The goal should not be to proceed only if a consensus is reached among all residents. There will certainly be those who will argue against the necessity of diversifying the economy. There will also be some concern regarding the types of businesses or industries that will be established in the area. These concerns can probably be overcome by clearly explaining the advantages of diversification.

One advantage is that the tax base will likely be expanded. Politicians are typically concerned about widening the tax base because doing so tends to allow them to avoid increasing residents' taxes. They also enjoy having the ability to implement new programs or projects without the need to find outside revenue. Therefore, widening the tax base becomes an objective of economic development whether stated explicitly or not (Lyons and Hamlin, 2001).

However, it should also be pointed out that increasing the tax base generally calls for a different focus than when creating jobs is the objective. To create jobs, there needs to be activities that require labor, whereas an increase in the tax base calls for firms that need a great deal of capital. For that reason, economic development planners aiming to broaden their tax base

have often favored dealing with the real estate industry because they can develop such projects as office buildings or hotels. For states that have a local sales tax, widening the tax base could have meant opening many commercial enterprises such as fast food franchises (Lyons and Hamlin, 2001).

A second advantage of diversification is that it will likely lead to an increase in property values. Communities with higher assessed property values are more desirable. The power structure in a given community will usually promote such increases because they usually own large amounts of real estate. However, property values are highly dependent upon geographic location and local economic improvements will not guarantee increased values. A surer way of increasing values is to establish and maintain a high quality of life over the long term. (Lyons and Hamlin, 2001). Diversification will significantly reduce the community's dependence on a single industry; therefore it will not suffer as badly in the event of a downturn in defense spending.

Wealth retention is another advantage of diversification. This might be the ultimate goal of some communities and the primary objective of most economic development plans. Even with generous numbers of job being created, if those jobs have no effect on the net increase in a community's wealth then job creation efforts cannot be considered to have been effective. The wealth generated in a community cannot be allowed to leave. Wealth is lost when residents spend their money outside of their own community. Businesses and industries in the community do not contribute to the retention of wealth if most of their suppliers are located outside the area. Investments also do not contribute to wealth retention if those investments are not put to use in the community (Lyons and Hamlin, 2001). In pursuing diversification the locality can seek out activities that contribute to wealth retention.

Another advantage of diversification is that it can lead to an overall reduction in poverty. Poverty tends to be entrenched and is difficult for local governments to eradicate. If a locality does devise a policy that actually reduces the number of poor, then more poor people tend to move in from other areas. Because of that, poverty has often been declared to be a national

problem requiring a national resolution (Lyons and Hamlin, 2001). But a more diverse economy will certainly provide an opportunity to lessen poverty generally.

Significantly reducing poverty, however, entails more than producing additional jobs. Since some poor residents have long been deprived of many of the basics of life, health and personal services might be needed to help an unemployed person into full employment. Working with the chronically unemployed is a process that can be time consuming and calls for some initiative on the part of the resident as well as the will to follow through on the assistance. At any rate, some sectors of the poor community will still not be reached (Lyons and Hamlin, 2001).

Economic stability is another advantage of a diversified economy. When a community is dependent upon the cyclical nature of defense spending, even the boom times can result in reductions in employment. In order to deal with cutbacks and layoffs, individuals and their families usually have only unemployment insurance and savings to rely on. Communities can be caught unprepared at either end of the cycle. Newer businesses are particularly vulnerable to these swings (Lyons and Hamlin, 2001). With a more diversified economy, there will be enterprises in the community that will have an opportunity to pick up the slack from one another. Businesses will have a wider spectrum of patrons and markets. Achieving this level of diversity entails establishing firms that are "variously affected by the economic vicissitudes of the outside world" (Lyons and Hamlin, p. 4). This will call for the policy makers to have a clear understanding of the markets and how they are associated with one another. One goal of the proposed community diversification committees could be to stimulate an increase in production in industries that are "countercyclical" to the military industry (Lyons and Hamlin, 2001). In other words they would want to find an industry or industries that are likely to prosper if there is a decrease in defense spending.

Economic self-sufficiency is another advantage of diversification. This element aims to conserve wealth while at the same time promote stability. Complete self-sufficiency is not likely and probably not desirable since contact with other localities helps to produce wealth. The

objective is really to decrease the number of goods imported into the community. (Lyons and Hamlin, 2001). Since most communities import all of their energy, companies that can devise ways to conserve energy within the community could be useful in accomplishing this objective, since that would mean more wealth retained in the community that would have gone to some other place. Agriculture is another sector that could help an area become more self-sufficient. Growing and processing food in the community can increase self-sufficiency while at the same time creating profits for farmers. Food can be grown, processed, and sold throughout the region (Lyons and Hamlin, 2001).

To make the most of these advantages, it is important that the policy makers and planners be cognizant of the need for the objectives to be complimentary to one another. Fostering an improper mix of enterprises can significantly reduce the advantages and benefits of diversification as one entity could possibly reduce or cancel the effects of another, resulting in little net economic benefit (Lyons and Hamlin, 2001).

Some components that Melman uses for facilitating economic conversion planning and operations can be adapted to diversification planning as well (Melman, 1989). They include:

- 1) Mandatory diversification committees. Every community interested in participating in the diversification program should be required to establish a diversification committee as a condition to participation. This committee would be responsible for preparing the initial plan and would include people from the political arena, professional planners, local businesses people, community organizations and residents. Educational institutions can also be used as a resource. The choice of who would be responsible for implementing the plan would be up to the individual locality. It could be a government agency such as the planning office, a citizens' group, or the committee itself could select a sub-committee. The diversification committee would be responsible for reviewing the progress and implementation of the plan.

- 2) Advanced diversification planning. Once the plan of diversification has been put into motion, continued planning would be required to assure that the ultimate objectives of the initial

plan are carried through. This involves the committee modifying or changing the original plan based upon an analysis of the results of past actions. This could continue even after government funds are no longer being sought.

3) Required Notification. Communities must be notified at least one year in advance if the Defense Department does decide to close, downsize, or reduce operations at a base. Advanced notification on reductions is essential to allow the community to plan for the impending changes.

4) Occupational training. Residents of the local community will be given the first opportunity to train for and fill jobs that are created as a result of the diversification program. This includes military personnel released from active duty. The locality would provide the training. Residents that have skills better suited for a job in another diversifying area would be given the opportunity to accept employment in those areas.

5) Community economic adjustment planning. Where the military entity has a significant presence in the area, diversification might call for a major change in the collective community outlook and self-perception. Residents might cease to look at themselves as a "military town." A lot of former defense workers will have to adapt to an environment where goods are produced for profit. As defense jobs begin to lose their economic importance, they might also begin to lose their prestige. As new jobs are created, requirements will arise that relate to the new types of employment.

6) Decentralized control of diversification planning. Although the federal government would be charged with implementing the policy at the national level, the process of diversification should not be engineered from a national office. Localities should take the lead in devising and implementing plans with broad guidance from the federal level.

7) A network of employment opportunities. As jobs are created through diversification efforts throughout the country, it would be sensible for the various communities to network in order to have the ability to place workers who might fit in better at a different location. A data

base of jobs created would be maintained for the purpose of ensuring that workers in the effected communities have knowledge of what opportunities are available in other diversifying areas.

8) Capital investment planning by government. Once the local economy begins to show signs of successful diversification, municipalities should begin to devote revenue to infrastructure improvements. The aim would be to bring any neglected or insufficient parts of the infrastructure up to date. This will facilitate more growth and will help ensure that the effort and money invested in diversification will be more likely to continue to perpetuate successes.

One other aspect of the diversification process that can have some influence involves the location of the entity that will oversee the work at the federal level. Commentators on military conversion planning agreed that the agency that currently has responsibility for the military economy was the organization best suited to steer that effort. Thus the Department of Defense was the logical choice. Likewise, the DoD would be a logical choice to oversee the administrative aspects of military community diversification efforts. The essential logic is this: "why not locate responsibility for conversion to civilian work precisely in the place that organizes all the military-serving market?" (Melman, 1989, p.162). The OEA would therefore be the choice as the location of the administration of the national diversification policy. The OEA would be responsible for formulating guidelines including determining program eligibility, processing request for grants, coordinating among the diversifying localities, and ensuring compliance with federal policies. The broad directive of the OEA would be to help facilitate economic diversification in communities dependent upon defense spending.

Investments in the military have often been made at the expense of other elements of the national economy. Given that federal funding for essentials such as education and some social services have not been as fully funded as defense, spurring local economies to be able to become more capable of investment in these neglected services should be an additional aim of the program. In fact, the OEA's charter for this program could well be to establish profitable private enterprises and to "forestall business failures and job losses that would result from sudden

reductions in military (spending)" (Peattie, 1989, p. 32). The OEA already works with defense communities and they are familiar with the dynamics of public-private partnerships for economic development.

The public and private sectors have made significant advances in their economic development partnerships over the last 30 years. The efforts have relied on a judicial and legislative understanding of the meaning of "public purpose" as it relates to a government's ability to involve itself with local economic policy (Green, 1991).

Because this approach attempts to stimulate and sustain new economic activity, diversification would not engage in the type of development that merely shifts employment burdens from one locality to another. At its best, it would incorporate some of the ideas expressed by Jane Jacobs as they relate to economic and social vibrancy. It would enhance an area's ability to adapt to a changing economic environment, help decrease crime, and involve people in attacking crime and other social problems that often make it difficult for enterprises to develop (Green, 1991).

Another significant selling point for diversification is that leaving a stable local economy behind will make it easier to close obsolete, unneeded or unwanted military bases. When the military wants to decrease its spending, particularly if it will significantly impact certain geographic areas, it is often difficult to do politically. The fact that a lot of defense contractors are clustered and a lot of military facilities are isolated tends to create pressures to keep defense dollars flowing to these areas. When they have no other viable economic alternative, dependent communities will go to great lengths to keep their facilities in operation, "even when it is demonstrably clear that continued funding is simply an exorbitant public works program:"

Billion dollar Seawolf submarines, unwanted by even the Pentagon, do bolster the sagging economy of southeastern Connecticut. The 1980s buildup, by stimulating job growth and migration to these types of communities, compounded the problem by shifting political power toward 'gunbelt' locales in the 1990 redistricting of Congress. Politicians from these communities have often been in the forefront of advocating a

meaningful national conversion program, but rebuffed to date, they are often forced to fall back on maneuvering for more military spending (Markusen and Oden, 1995, p.5).

Government funds have typically been used to help defense corporations much more than individuals or communities affected by cutbacks.¹⁹ For example, the federal government provided the financial stimulus that allowed defense firms to conduct mergers and acquisitions, even during times of reduced defense cuts. Lobbyist led the government to get involved to provide generous financial compensation packages that allowed the companies to look for merger partners and proceed with the expensive merger process. The justification given for the use of public funds in this manner was that these mergers would produce savings in the future. The mergers amounted to billions of dollars in subsidies to companies such as Lockheed/Martin, and succeeded in helping these corporations maintain their profitability (Braddon, 2000).

In the meantime, local communities and regions that were complacent as long as the defense dollars continued to roll in eventually began to realize their vulnerability. They have since been looking for ways to reduce their dependency (Renner, p. 40).

Since the OEA would be called upon to administer this policy, it would be wise to abide by the ten principles that the organization has compiled from helping defense dependent communities recover from defense cuts (Office of Management and Budget, 1977). The principles include: 1) unity: communities that unite tend to have more success in overcoming the impacts of defense cuts. Unity includes the area immediately surrounding the base uniting with neighborhoods from outlying areas from which workers commute; 2) organization: when

¹⁹ During President Clinton's first term, the then Secretary of Defense, Les Aspin, initiated a major review of exactly what the US defense industrial base should be comprised of. This review was abandoned as their focus quickly switched to the type of efforts that would be required to free up private sector initiatives to reconstruct the defense industrial base. The Pentagon permitted some high technology weapon systems to be exported as a way to protect the business prospects of US defense manufacturers during the period of severe defense cuts in the domestic economy. More importantly, under Secretary of Defense William Perry, a plan was put in place to reimburse companies for the cost associated with the merger process (of multiple companies producing the same system or weapon being consolidated into one). As a result of the implementation of this plan, large US defense contractors remained generally profitable during the defense cuts of the 1990s (even as workers lost their jobs), an unprecedented development given the damaging profit consequences for contractors of earlier defense expenditure contractions such as those after WWI, WWII, Korea and Vietnam (Braddon, 2000, p. 111).

communities decide to act at the grass roots level, they should form committees for a better coordinated effort; 3) plan: whatever organization is established must clearly chart a direction and develop a strategy for action; 4) leadership: the grass roots entity must produce strong and capable leaders with knowledge of the situation, ideas and dedication. Leadership includes business leaders, church leaders, union leaders, professionals and others that might be able to contribute their talents. Leadership might also include involving the news media; 5) advice: using the human resources of the community to help analyze and solve problems is essential. If necessary, expert, professional advice should be obtained; 6) acquisition: when it comes time for establishing new industries, it should be remembered that growing companies like to locate in areas that have readily available land and/or buildings to accommodate manufacturing and commerce. It may be necessary to create these resources by, for example, constructing shell buildings; 7) development: the community might benefit from guiding its overall development plan towards accommodating new industries. The plan should be scrutinized to see what changes could be beneficial in helping the community in transitioning from military dependence to diversification; 8) promotion: the committee will have to have an effective campaign to let potential enterprises know about the desires for new businesses to start up or expand into the area. Promotion requires a well thought out sales strategy that highlights the positive attributes of the area; 9) management: the effort to attract and retain industries will largely depend on how well the effort is managed. Incompetent management can lead to a wasted effort that leaves the community short of its goals. Committees and leaders must have the authority and responsibility to act in a manner that will be most advantageous; 10) reflection: looking back and benefiting from lessons learned is helpful to the ongoing, continuous improvement of the program. The benefits of diversification and the aspirations of the community should be reviewed and analyzed on a regular basis (Office of Management and Budget, 1977).

When it becomes apparent that a community will pursue a program of diversification with federal assistance it would contact the OEA for guidance. The process of diversification planning would then begin. At that time the locality would establish its goals and objectives. All of the elements outlined above should be carefully considered. The economic development objectives established at the local level would provide statements that will guide the community's actions. After measurable objectives have been determined, an inventory of the local economic situation should be taken. This includes collecting and analyzing data that will help refine the objectives. Next, the nature of the public-private partnership should be established and the methods for carrying out the partnership should be identified. The next step is to outline the economic development program. This step details the specific actions to be taken during the planning cycle. After the program is devised, it should then be evaluated to determine the degrees of success and to determine where changes are necessary. All available resources would be exploited to help produce a plan that will achieve the objectives. Often nearby colleges or universities can provide assistance with the process.

The characteristics of measurable objectives are: they can be achieved; the length of time needed to achieve them is known; and progress towards the objectives can be measured (Lyons and Hamlin, 2001). Each community must determine exactly what it wants to achieve in terms of diversification. However, the primary goal of the process would be to reduce dependency on defense spending to the point that any cutbacks can be absorbed by other industries. The amount of time needed to accomplish this might be imposed, at least to some degree, on the agency overseeing the process (in the proposed case the OEA). The following model assumes that Congress has passed a law giving the OEA authority to fund defense dependent localities in their efforts to diversify their economies. Succinctly, The law might read in part as follows:

Defense Dependent Community Economic Diversification Act: The Department of Defense, through its Office of Economic Adjustment, shall provide financial and other assistance to communities determined to be economically dependent upon national defense spending.

If the goal of the economic development initiatives is to broaden the local economic base in order to mitigate the cyclical impact of defense spending, one measurable objective might be to increase the number of jobs by 3,000 in industries that have been determined to be counter-cyclical to defense (Lyons and Hamlin, 2001). The term “countercyclical” should be carefully thought through and clearly defined, and could mean those industries that have cycles that are opposite to those of defense. To determine whether the development program is actually having the intended impact, we need to be able to evaluate whether the program is causing the desired changes. Achievable objectives should be measured at intermediate stages (Lyons and Hamlin, 2001).

The point of establishing measurable objectives is to force the policy makers to consider their future courses of action. Politicians might be reluctant to list specific goals. But given the likely resources needed to implement a diversification program, it must be shown that the actions taken have a good probability of success. Defining measurable objectives accomplishes the following (Lyons and Hamlin, 2001):

1. measurable objectives forces people to think more precisely about the actions they will take;
2. encourages positive discussion;
3. establishes a benchmark of success that allows for periodic assessment directions and actions;

4. helps those participating in the process put the necessary day-to-day activities of economic development into a larger context;
5. provides daily feedback on progress so as to give both a stimulant to and a psychological reward for such progress (Lyons and Hamlin, 2001).

Getting the objectives built into the diversification development plan will require some amount of creativity. Lyons and Hamlin recommend that the following steps be taken to make the process of establishing measurable objectives more achievable:

1. Have an advisory group for the development program set measurable objectives and monitor progress toward them.
2. Be sure the group has no more than about five people, to encourage more discussion.
3. The group should have brief meetings at a rate of about once per month.
4. At least one or two elected officials should be a part of the group, but the entire membership of the group should not be politicians.
5. Include at least two or three different sectors of the local business arena and individuals from the general community.
6. Find out what other organizations think by conducting a survey of outside groups before discussing objectives. When feasible, survey the community at large to gain a sense of community purpose.
7. Narrow the discussion to make decisions on about five to ten measurable objectives that can be accomplished within a one year period.

8. Ensure that the data collection procedures allow for the evaluation of progress.

Goals should be divided into one year objectives (Lyons and Hamlin, 2001).

9. At least once each year, reevaluate the objectives.

Once the measurable objectives have been clearly defined, the next step is to take an inventory of the local economic situation. Data is collected and analyzed to provide knowledge of the local economy. The measurable objectives are then revised based on the data analysis. The more that is known and understood about the community the more the objectives can be tailored to fit the needs of the community. Thus, by first establishing the goals and objectives, the information needed to proceed can be determined. There are various methods that the community can use to gather and analyze the information for diversification development planning (Lyons and Hamlin, 2001).

Planners familiar with the methods of quantitative data analysis can be key figures in the data collection and analysis process. While some data will be readily available, some will require considerable work to obtain. The data collected should, first of all, be worth collecting on a regular basis. It should be part of an overall management information system. One should also be able to immediately analyze the data upon its collection so that it can help in the decision making process (Lyons and Hamlin, 2001). Other elements that can be used to guide data collection include: gathering information related to the established measurable objectives mentioned above; collecting data on what potential firms might require; and putting together information that will help the local economy be responsive to needs outside the area (to help promote outside investment) (Lyons and Hamlin, 2001).

Federal, state, and local governments will have a role to play in diversification plans. Joint efforts between the public and private sectors have been used in innovative ways throughout the nation and the world to spur economic development. The basic idea behind the cooperative endeavor is for the public sector to partner with private entities to encourage mutually beneficial relationships (Lyons and Hamlin, 2001).

Such cooperation has two dimensions: the policy dimension, in which goals of the community are articulated, and the operational dimension, in which these goals are pursued. The purpose of public-private partnership is to link these dimensions in such a way that the participants contribute to the benefit of the broader community while promoting their own individual or organizational interests (Lyons and Hamlin, 2001, p. 43).

Frequently governments intervene in the free market economy when they determine that imperfections exist in the market place. To what extent the government should become involved and the method of any involvement is debatable. The peculiarity with communities dependent on defense spending is that there really is no free market since the government already controls much of the economy. Thus, any intervention can be viewed as more of an adjustment to current policy.

In the case of diversification, the public-private collaboration is formed to address a major development issue that affects several communities. The government entity in the partnership will be the OEA at the national level. States affected might want to create a similar organization at the state level to coordinate between the federal and local governments. In addition to funding and overall guidance, the OEA can help remove or counter some of the externalities that sometimes overpower market forces, such as industrial junk located on a water front that's ripe for commercial investment.

The OEA can also help develop an appropriate infrastructure to facilitate the diversification process, both with respect to economic and social considerations. With its charter the OEA can help locate new economic opportunities and potential national and global markets,

support appropriate employee retraining, and pursue other means of enhancing the prosperity of the communities in which the diversification process is being carried out (Braddon, 2000).

The OEA, along with the state and local governments, can help new and expanding firms attract civilian sales by educating and training employees, encouraging research activity within firms, assisting with financing new investments, subsidizing research, and informing managers about the competitive requirements for their industry. Researchers have argued that one factor that made the New York State Defense Diversification project successful in diversifying was the various types of aid, including financing, marketing and industrial extension assistance. (Feldman, 1997). Successful programs offer assistance in areas where the firms currently lack capacity, such as in research, manufacturing, marketing, and finance (Feldman, 1997). To successfully diversify, there must be a menu of assets and development options from which to choose.

One type of asset that could be made available is business management assistance. In creating new business enterprises or expanding existing ones, assistance to help idea people or technical experts translate their thoughts and know-how into profitable firms would be needed. This could entail providing education on how to conduct the day-to-day operations of a business. Since inadequate management is one of the primary causes of new business failures, local communities can provide programs for management and business development assistance. Again, local colleges and universities are a good resource for such an endeavor. The OEA can help with the initial funding of organizations such as Small Business Development Centers, business incubation programs, and entrepreneurship training courses. The local chambers of commerce, local banks, colleges, and other public, private, and nonprofit organizations can play significant roles to make this a total community effort (Lyons and Hamlin, 2001).

To review before proceeding: once the measurable objectives have been determined by the community, the data for the formulation of the plan has been collected, and the public-private relationship has been defined and established, the more specific elements of the diversification

development plan can be added and the complete plan drafted. In the following outline, the parts of the action plan will be described first, followed by some ideas that have been successful in various communities (Lyons and Hamlin, 2001). The final element is an evaluation of the plan.

An outline of the implementation plan would be similar to the following:

I. Action Plan: In developing and implementing the action plan, policy makers should be prepared to answer the critics of the program who typically maintain that economic development plans a) give a windfall to businesses; b) simply move jobs from one location to another; c) reduce the amounts of funds available for other services such as transportation and education; d) create inequities among industries and firms; e) perpetuates the suspicion that the government gives favorable deals to the selected few; f) provide no net benefit to the economy; and g) get the government too involved in the private sector (Snell, 1998).

a. Action Statement: The first part of the plan is an action statement that briefly defines the actions that will be taken by the community or its representatives.

b. Description: Provide a more detailed description of the action statement.

c. Process: State the steps necessary for carrying out the action and show the timetable that will be required to implement the plan.

d. Results: Describe the intended results of the actions to be taken.

e. Finance: Identify the sources of financing for each of the actions to be carried out and state who will be responsible for obtaining and providing the funds. Clarify whether any additional funds will have to be generated.

f. Secondary Impacts: State what the expected consequences (possibly unintended) will be of carrying out the plan (Lyons and Hamlin, 2001).

The economic development plan should include long term goals as well as short term goals. They should include a realistic assessment of the community's possibilities. Built into the plan should be opportunities for flexible responses to unexpected opportunities. Policy makers should not proceed with plans that are not in the community's long term interest (Snell, 1998)

II. Economic Development Strategies: These are some strategies that have successfully stimulated economic growth and development from within communities (p. 104). The first three programs listed below focus specifically on promoting entrepreneurial endeavors. The programs aim to reduce or eliminate the barriers many people face in their desire to start up a new firm, as well as barriers that decrease a new firm's likelihood of survival. In the case of a nationally sponsored diversification effort, the entrepreneurial programs should also make concerted efforts to reach out to those not typically considered to be excellent prospects for starting their own enterprise. A 1993 Census Bureau Survey of Income and Program Participation showed a profile of entrepreneurs to be those with household wealth of over \$100,000, aged in their late thirties or forties, married, male, and having five years of college education; a low percentage were African-American. (Bates, 1993). Studies have shown that financial capital scarcity is a major hurdle that Black entrepreneurs in particular face in their business ventures. Government programs that provide loans to minorities can help open up opportunities for creating new firms and expanding existing ones. But it must be realized that merely making capital and some training available will not replace the required human capital needed to form and operate a successful business (Bates, 1993).

a. Business Incubation Programs: This program helps establish and grow new enterprises. Incubators can generally be categorized either residential, virtual, or a hybrid of the two. Establishing a residential incubator requires that physical space and some common support services are made available for a number of small start-up companies. The virtual incubators are

not constrained to any particular location. Instead, this type provides a network for new enterprises. The hybrid type has a facility but the services can be made available to businesses outside the facility. The start-ups can be centered on high tech, bio-tech, or any type of industry. Incubators help minimize the overhead cost normally incurred in starting up a new business. They also locate financing and sharpen management abilities. They also pool the various firms' resources and thereby spread the risks among those firms, helping them develop the capability to function on their own as self-sustaining entities. (Lyons and Hamlin, 2001). Their primary purpose is to help small businesses grow by providing favorable conditions. (Snell, 1998). Statistics from the U.S. Small Business Administration show that up to 80 percent of small businesses fail within their first five years. But about 80 percent of firms that begin their existence as incubator tenants become profitable within their first three years (Snell, 1998).

Business incubators would center on the following three principles:

1. The efforts and resources of the incubator would be geared towards developing new companies.
2. The incubator should be managed as a business, spending only what is necessary on overhead costs, becoming self-sustainable, and focusing on efficiency.
3. There should be a broad range of services and programs that can be tailored for companies based upon their requirements and the stage of their development (Rice and Matthews, 1995).

b. Micro-enterprise Programs: This program typically assist low-income entrepreneurs and individuals who are or want to become self-employed. Most of these types of programs provide small loans (as little as \$50 and no more than a few thousand) and help with business development (Snell, 1998). The objective is to provide access to capital and business

development skills. This program is normally geared to individuals who typically have a difficult time accessing capital in the traditional manner. Micro-enterprise programs are often tied to the concept of asset-oriented community development, which focuses on the strengths of individuals and communities (Lyons and Hamlin, 2001).

c. Capital Access Program: Normally initiated at the state or local level this program is based on a loan insurance pool concept and is most often used in cases where entrepreneurs wish to pursue a venture that is considered to carry too much risk to obtain conventional financing. Those interested in supporting the venture deposit cash into a fund over a period of time. These accumulated funds are then used to back the loan for the new enterprise, making the loan seem less risky to traditional lenders. The government helps start the program and assumes a portion of the financial risk (Lyons and Hamlin, 2001).

d. Social Capital Building for Business Retention: Increasing numbers of local and regional economic development agencies are using this strategy, involving social capital building for the purpose of economic development. Social capital, as used in this sense, is analogous to the other forms of capital: human, physical, and financial. The strategy was used to transform Tupelo, Mississippi from a poor rural community to a dynamic city with an excellent quality of life and a strong economy by developing an intricate set of social and economic networks over an extended period (Lyons and Hamlin, 2001).

e. Smart Park: This is the term used when an industrial park or an office park focuses on high tech firms. These parks have several amenities not found in the more traditional economic development park, including extensive, cutting-edge technology electronic connections and laboratory research. The objective of these parks is to help bring innovative new designs and inventions to the market place. It differs from an incubator in that the objective is not necessarily

to provide space, but to facilitate communication. This strategy is used mostly by communities trying to diversify and improve their economic base (Lyons and Hamlin, 2001).

f. Procurement Program: Normally a local economic development initiative, this program helps local businesses sell their goods and services to state and federal governments, and involves providing educational and technical assistance to interested businesses. In addition the program offers common services that businesses would need to initiate and follow through on government contacts (Lyons and Hamlin, 2001).

g. Rapid Industrial Preparation Program: This program essentially entails developing the capacity to construct a publicly owned industrial park within a very short amount of time. The goal is to be in position to attract a company that has to quickly locate a facility for its operations, but without the community having to absorb the front-end cost of actually constructing speculative facilities in advance of obtaining a committed tenant. The preparation involves having some type of organization set up and ready to act to implement a step-by-step procedure for accommodating the new enterprise in a short amount of time (Lyons and Hamlin, 2001).

h. Backshop Development Program: Development offices in low cost of living jurisdictions use this tool stimulate their economies. They entice companies that offer relatively expensive services to save money on those services by shifting some aspects of their operations to the low cost area. The following characteristics may define such an area: lower transportation costs and lower taxes (Lyons and Hamlin, 2001).

i. Foreign Trade Zone: These are places where foreign goods are stored inside the United States for the purpose of processing, reshipping, etc. There are no customs duties paid on items stored at these locations. These zones were once only located near major port facilities such as

New York or San Francisco. Now any locality that can demonstrate that it has enough tenant demand to pay the costs of operating a zone can apply to have a zone open in its area. Several communities around the country have used this as a tool for economic development. A profit seeking corporation would have to work with a local economic development organization in order to be considered. These zones are established with the intent of promoting foreign trade and helping the U.S. compete in foreign markets (Lyons and Hamlin, 2001).

j. Enterprise Zones: This is method of targeted tax incentives and regulatory relief at a specific geographic area. These programs concentrate their efforts on developing small businesses in impoverished communities and creating net new jobs. (Green, 1991). Historically, these zones have targeted communities for development based on the level of unemployment, poverty, age of housing stock, or other signs of a weak localized economy. However, some states have expanded the use of the concept to include areas far beyond the boundaries of urban decay (Snell, 1998). Enterprise Zones can be organized at the state or federal level.

k. Tourism: Policy makers and planners should conduct an objective survey of their communities to determine whether there are attractions which outsiders would be interested in traveling to see. Attractions could include permanent displays, natural preserves, or events. For tourism planning to be effective, the attractions should be relatively close to each other, of a high quality, and be somewhat unique (Pearce, 1992).

l. Business Retention Programs: The entire focus should not be on starting new business enterprises. Some effort should be devoted to ensuring that firms already located in the community do not close, relocate, or reduce their number of employees. Addressing this type of issue is likely to call for a different approach each time the situation arises, however, there can still be some type of general procedure to be followed that will apply to any case (Snell, 1998).

III. Program Evaluation. This phase analyzes the program and makes a determination as to what the proper mix of projects and activities should be. Since it emanates from assumptions and (sometimes) arbitrary decisions made during the process, it is largely subjective, based on opinions and intuition. However, quantitative data analysis can be used effectively as a means to “discipline intuition” (Lyons and Hamlin, 2001, p. 144).

a. Pre-Implementation Evaluation: Before the economic development plan is put into action, the planners and policy makers should do a complete analysis of it to ensure that it will make the best use of available funds. This includes performing a cost-benefit analysis to determine whether the selected mix of projects is the best for the locality. Community and business leaders should be involved in this process (Lyons and Hamlin, 2001).

1) Benefit-Cost: There are several methods available to calculate and analyze the cost effectiveness of a chosen course of action. Basically, the idea is to calculate a ratio that will assign a benefit per each dollar spent. The projects with the highest ratio should probably be given the highest priority for implementation. One technique that is applicable to public sector programs is termed cost-effectiveness analysis. It gives a very inclusive definition to public sector accomplishments, but it compares accomplishments (a non-numerical concept) to numerical dollars (Lyons and Hamlin, 2001).

The technique known as benefit-cost analysis produces a ratio that will give us a dollar to dollar comparison. It does this by translating the benefits of the program into numerical quantities. (Lyons and Hamlin, 2001). But since there is no exact scientific or mathematical formula that can perform this task with exactness, there is still much subjectivity involved.

2) Cross-Impact Matrix: A matrix is one means of guiding program evaluation without becoming tangled in the web of numerical analysis. A cross-impact matrix compares the

benefits of a program with the costs to implement the program over time. Projects which the matrix predicts will have the highest score should be given priority. This matrix can be utilized to test a plan prior to it actually being implemented, and it can be maintained throughout the implementation process (Lyons and Hamlin, 2001).

b. Ongoing and Post-Program Evaluation and Feedback: In order to continuously reassess goals and to ensure that the program remains on the most productive track, progress towards the objectives should be measured. Measuring progress involves maintaining information systems and using the data available to determine how much a particular project helps attain the overall objectives. New data or updated information could cause a change in direction or priorities. Careful analysis of the information being maintained may reveal that original assumptions were incorrect.

In considering which economic development programs to pursue, communities should also be cognizant of emerging trends such as local policy initiatives that help integrate local economies into global markets. The communities should also understand that the objective here is to achieve diversification through economic development and not merely to stimulate economic growth. The choice of the mixture of industries, in particular industries engaged in export, will determine the rate of growth. "Development supports the sequence from invention to innovation and then to commercialization. It leads to higher levels of welfare in terms of (1) income level, (2) income distribution, and (3) income stability" (Malizia and Feser, 1999, p. 244). The processes of economic growth and economic development are related; however, development is a more fundamental concept that leads to competitiveness and maintains that competitiveness over time. Economic growth comes as a result of the competitiveness that is built through economic development (Malizia and Feser, 1999). If successful, therefore, the diversification development

plan will significantly increase the community's competitiveness and growth, as well as increase its adaptive capacity.

Once businesses begin to grow, economic development efforts should not be considered complete. Another task is keeping those businesses in the community as they grow and expand. Economic development officials should maintain contact with new enterprises to stay aware of their progress and gain advanced notice of any potential that could affect the wellbeing of the community. Maintaining this contact can be accomplished by a business visitation and surveying program. Feedback from the contacts would serve as a system of early warning that would alert the policy makers and development officials of companies' plans, problems and concerns that might result in relocation, employee layoffs, or in a firm going out of business.

Policy makers would use information collected from surveys to establish a data base that will allow local economic development officials to keep up with the latest information that could influence the economic well being of companies or of particular sectors. The surveys can be accomplished via the mail, administered by volunteers or paid development employees in-person, or a combination of the two methods. The surveys would also gather information on items such as the local business climate, labor and training needs, and barriers to growth. Companies identified as being at risk of failure or of leaving the area would be given immediate attention (Council for Urban Economic Development, Feb 2002).

Diversification implies much more than simply shifting away from all things military to all things civilian. Attempting to diversify a local economy in an indiscriminate manner could have the effect of exacerbating existing problems, and could increase civilian overcapacities and make any unemployment problems more entrenched. Diversification is deeply concerned with the type of economy that will take shape after the programs have been put in place. The ideal is to produce goods that will benefit society and that will satisfy unfulfilled needs for housing, health care, energy, environmental protection, transportation, and education. A more varied approach, therefore, is needed than merely setting out to stimulate local economic growth

(Renner, 1990). As we will see in the following example for Pulaski County, Missouri, the most significant step for the residents is to ensure that they take an accurate and precise measure of their existing economic base.

Chapter Five

APPLICATION OF THE DIVERSIFICATION PROCESS TO PULASKI COUNTY, MISSOURI

This chapter applies the model of the economic diversification development plan to an actual defense dependent community. In this application we can see the way in which that model can be used in a real life situation. The community is Pulaski County, Missouri which is the home of the Fort Leonard Wood U.S. Army Base. It is located in the nine-county Lake Ozark-Rolla region of the state and was selected for this case study because its relative isolation makes it somewhat easier to detect the direct and indirect impacts of its defense dependency.

With over 13,000 permanent active duty military and civilian employees, Fort Leonard Wood is the dominant employer in Pulaski County. Located on 100 square miles of the Ozark wilderness area, it hosts training for new army recruits and is the home to the nation's largest military Engineer Training Center. The base alone contributes over \$550,000,000 annually to the region (RCGA, 2002). The "community" included in this study will be comprised of all of Pulaski County, including the tri-city area of Fort Leonard Wood-Waynesville-St. Robert, which is the seventh largest non-metropolitan city in Missouri. Obviously Fort Leonard Wood is a tremendous economic resource for the area. However, its influence on the community goes far beyond the mere economic impact it has: the base also offers health, educational and cultural amenities to the area.

In 1995, the Base Realignment and Closure Commission (BRAC) determined that it

would move the Army's military police and chemical schools from Fort McClellan, Ala., to Fort Leonard Wood. The relocation of the facilities was completed in 2000. By the time the facility and all of its programs are up and 100% operational, an additional 14,000 people could be added to the Pulaski County area. The move is also expected to increase the military's economic impact throughout the Lake Ozark-Rolla Region from its current \$554 million to nearly \$600 million. The county formed The Regional Commerce and Growth Association (RCGA) in 1996 (after the BRAC announcement) for the purpose of assisting local communities in Pulaski County with adjusting to the impact of the increased number of personnel who would be relocating to the area. The RCGA was also tasked to create new jobs, investments, and more opportunities in the labor market. They paid the consulting firm HNTB to put together a county growth management plan (RCGA, 2002).

The county has had little success in attracting other industries in significant numbers. The county, as well as the city of St. Robert, has established industrial areas and a technology park to attract businesses. They offer financing arrangements, build-lease-back facilities, grants, tax benefits, and job training. However, there has been no noticeable initiative to establish industries that would not have a major dependence on the military.

Military members as well as civilian workers on the base are a significant part of the local community. Their children attend schools in the local school district. They purchase homes in the neighborhoods and patronize local businesses. The city of Waynesville has entered into a joint use agreement that will allow civilian planes to use Forney Airfield on the base (RCGA, 2002).

The city of St. Robert is the business center of Pulaski County. Founded in 1951, the city has tripled its land area in the last five years and has constructed a new municipal center. The city boasts of a new interstate plaza that features hotels, restaurants and shops.

The county's population in 2000 was 27,499 plus 9,381 military personnel stationed at the army base. There were 14,614 residents in the labor force. It is a mid-western, non-metropolitan

county. The unemployment rate as of January 2002 was 6.2%. Average personal income for 1998 was \$20,369. Approximately 6.7% of residents work outside of the county while about 13.7% of the people who work in the county live outside of Pulaski County. Other than the military base, the top employers are schools, restaurants, a jeans manufacturer, grocers, retailers, food service and management, churches, nursing and convalescent homes, banks, and department stores. (RCGA, 2002). From the chart below one can see what a significant role the military plays in supporting the community's economy.

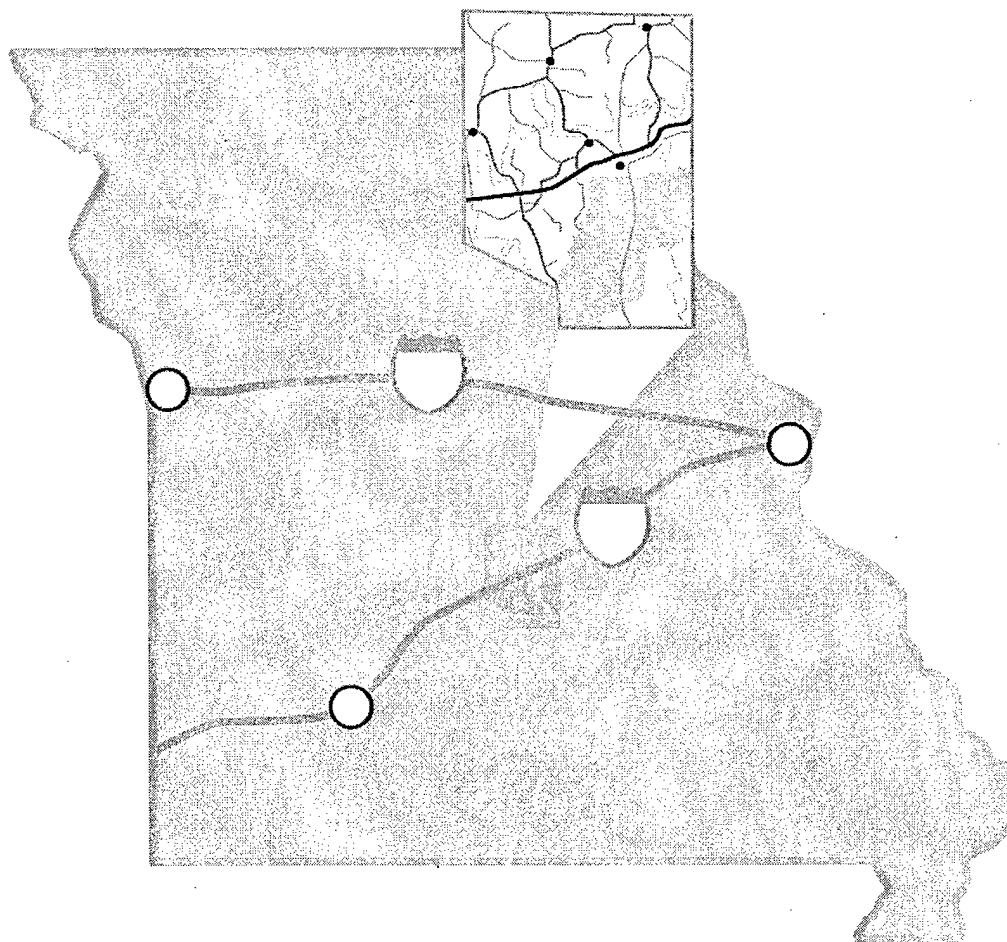
Table 2 - Pulaski County's Major Employers:²⁰

<i>Employer</i>	<i>No. of Employees</i>
Fort Leonard Wood	9,381 active duty/4,424 civilian
Lee Apparel Company	590
Waynesville School District	437
Albertsons Supermarket	200
Wal-Mart	175
Playcraft Pontoon	150
Dixon School District	150
Richland School District	100
Laquey School District	89
County of Pulaski	79
Crocker School District	70
Paramount Headwear	60
Life Care Center of Waynesville ⁵³	
Charger Fiberglass Boats	50

²⁰ Source: U.S. Census Bureau: State and County QuickFacts (Feb 2002).

City of St. Robert	48
Ashley May's Restaurant	45
City of Waynesville	44
American Publishing Company	39
Lakeside Truss Company	30
State of Missouri	30

Figure 1: Location of Pulaski County, Missouri



As a region, the Lake Ozark-Rolla area is performing better than the economy of Missouri as a whole. Over the last ten years the economic growth in the region has been much better in some areas than others. The area near the Lake of the Ozarks has performed well while

Pulaski County is struggling. Since 1990 the population has grown in the region by 9.9%, compared to 6.7% for the state. The poverty rate for the area is 14.1% compared to 12.4% statewide. Unemployment during 1999 for the region was 4.5%, which was somewhat greater than the state rate of 3.4%. Seasonal jobs in the fast growing tourist sector in the area probably accounts for much of the unemployment increase (RCGA, 2002). Also over the past decade, personal income growth and per capita income growth in the Lake Ozark-Rolla Region has been about the same as that for Missouri as a whole. Still the region lagged as its per capita income was only \$19,269 during 1998, compared with \$25,150 for the state. In the region, some of the larger employers include²¹:

Alliant Food Service, Inc.

Briggs and Stratton Corp.

Camden County R-III School District

Copeland Compressor Corp.

Fasco Industries, Inc.

The Gates Corp.

Lake of the Ozarks General Hospital

The Lee Apparel Co.

Paramount Headwear, Inc.

Phelps County Regional Hospital

Rolla Public School District 31

Tan-Tara Resort

Tracker Marine LP

US Department of Defense

University of Missouri

²¹ Missouri Economic Research and Information Center (MERIC, Feb 2002).

Trade, government, services, and manufacturing are the dominant industries in the region. In 2000 the industrial makeup of the nine-county Lake Ozark-Rolla Region was as follows²²:

Table 3 - Ozark-Rolla Region Industries:

		Agriculture, Forrest,							
Manufacturing	Fish	Mining	Construction	TCPU	Trade	Fire	Services	Government	
Camden	1,634	112	0	1,221	361	4,568	896	3,706	1,859
Crawford	1,618	34	0	256	213	1,254	196	988	933
Dent	766	17	0	114	77	920	125	626	1,028
Laclede	5,839	59	0	355	417	3,321	316	1,965	1,553
Maries	263	12	0	51	83	327	109	197	408
Miller	1,362	69	43	624	485	1,806	240	1,089	1,183
Morgan	780	160	0	254	141	1,372	171	470	989
Phelps	1,754	105	61	518	534	3,980	375	3,413	5,113
Pulaski	270	27	26	317	359	2,443	415	1,898	4,432
Reg.Tot.	14,286	595	130	3,710	2,670	19,991	2,843	14,352	17,498
Percent	18.8%	0.8%	0.2%	4.9%	3.5%	26.3%	3.7%	18.9%	23.0%

When it comes to business enterprises Pulaski, like every other county in the region, depends more on small firms with one to four employees. In 1999 the number of Lake Ozark-Rolla Region establishments by size (number of employees) was as follows²³:

Table 4 - Employer by Size:

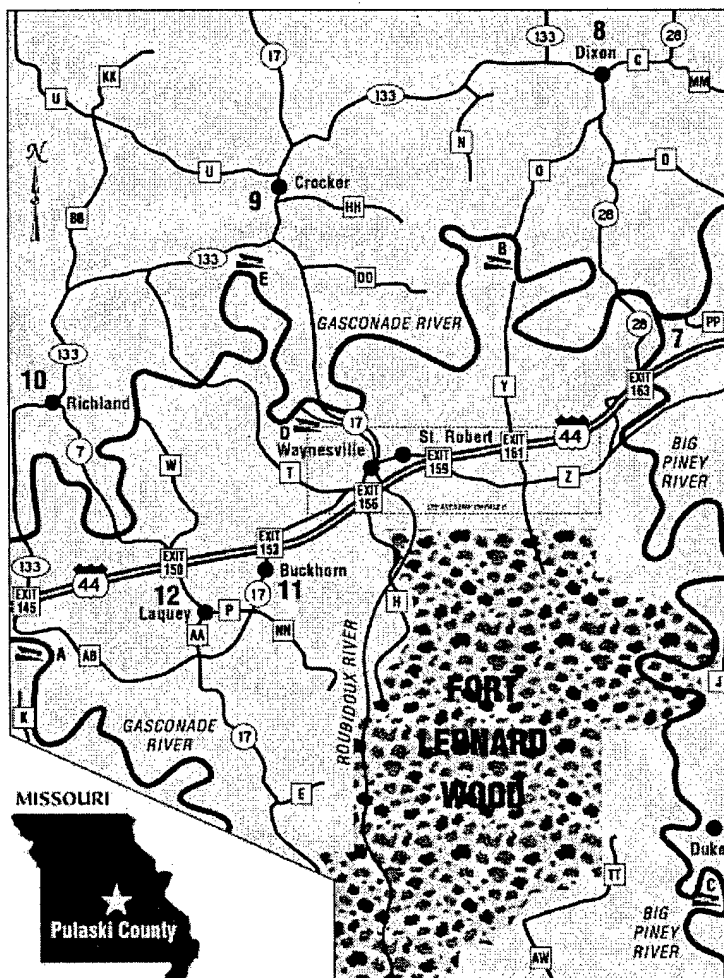
Employees	1-4	5-9	10-19	20-49	50-99	100-249	250-499	500-999	1000+	County Total
Camden	974	338	182	87	12	5	3	2	0	1,603
Crawford	298	77	53	26	18	6	1	0	0	479
Dent	255	60	30	20	7	3	3	0	0	378
Laclede	451	187	83	62	14	8	7	1	1	814
Maries	89	24	12	7	3	1	0	0	0	136
Miller	366	108	63	34	14	6	1	1	0	593
Morgan	315	98	49	21	3	2	1	0	0	489
Phelps	611	222	133	71	27	11	0	4	0	1,079
Pulaski	423	133	68	43	7	4	2	0	0	680
Reg.Tot.	3,782	1,247	673	371	105	46	18	8	1	6,251
Percent	60.5%	19.9%	10.8%	5.9%	1.7%	0.7%	0.3%	0.1%	0.0%	100.0%

²² Ibid.

²³ Ibid.

The information presented thus far gives some idea of the current state of Pulaski County's economy and its dependence on defense spending. With this information as a start, we can develop a clearer picture of the County's economic base and then proceed to apply the diversification process to determine how the Pulaski County community can go about reducing their dependence on defense spending. All available resources should be utilized including, in this case, the University of Missouri and its extension program. The University has educators and administrative personnel who have worked with Missouri communities and counties on the subject of planning from the mid-1950s to the present. The model will generally follow the outline set out in the previous chapter.

Figure 2: Location of Fort Leonard Wood Army Base in Pulaski County



Legal Framework

Missouri has a statute governing the establishment of a regional planning commission (Chapter 251 under "Community Affairs, Planning and Development" – see appendix A).²⁴ Government planning at the local level has its legal framework rooted in the constitution of the state of Missouri, state statutes, and charters. Pulaski County currently has both a three-person Economic Development Committee and a ten-person (including three ex-officio members) Zoning and Planning Commission (RCGA, 2002).

If the federal government passed the "Defense Economic Diversification Act," proposed in the previous chapter with a Defense Economic Diversification Council or some similar group charged with implementing the policies and goals through the OEA, it would be organizations in Pulaski County and possibly at the state level who would work to initiate and coordinate efforts to bring about diversification to the area. This process could be simplified if the federal government could accurately and consistently predict the country's future defense needs. Federal spending priorities can change relatively quickly and with little notice, however, and trying to predict what a given administration will do with regards to defense is a gamble. So it is up to each community to lessen its vulnerability to swings in the defense economy. Using the established legal framework, Pulaski County would undergo diversification planning by implementing elements of the model to expand the county's existing economic base.

Establishing Goals and Objectives for Economic Diversification in Pulaski County

The county should first put together a committee to establish the goals and objectives for diversification. This group will satisfy the requirement for a mandatory diversification committee

²⁴ The statutes covering cities are in chapters 89.010 to 89.480; those covering counties are 64.510 to 64.690 and 64.800 to 64.905; and the chapters covering regional planning commissions are in chapters 251.150 to 251.440.

called for in the model. The Department of Community Development at the University of Missouri-Columbia has outlined ways in which effective study committees can be developed for the purpose of accomplishing the important step of defining objectives. The University of Missouri can help Pulaski County with this process.

Study committees can generate considerable enthusiasm with recommendations that will help solve the community's problems. They can develop a 'group spirit' that carries over into the community. This 'group togetherness' is greatly influenced by methods study committees use. While there is no one way of achieving a "group spirit," there are known factors that influence its development (Gabriel, 1993).

With the guidance of the local governing body, this report proposes that the diversification committee will be established, comprised of volunteers from throughout the community who will be chosen (preferably through a community forum) based upon their personal interests and their interest in the matter to be resolved, what they can add to group discourse, and upon their commitment to the purpose and goals of the committee (Gabriel, 1993). If the importance of the need to diversify is made clear, then the committee will be more willing to devote their time and effort to their tasks of determining achievable goals to be presented to the rest of the community. The University of Missouri has University Extension Centers throughout the state that will provide assistance to community development leaders. It is important to have the proper guidance in the initial stages of the diversification process. Studying the issues, understanding their meanings, and articulating what issues need to be addressed are critical in developing the ability to make intelligent decisions in this process as well as in convincing the community of what those decisions should be. But "beliefs, attitudes, and values may block out 'facts' and information" (Gabriel, 1993). The culture of acceptance and dependence on defense spending may be a part of the community norms which could produce impediments, and some of the resistance mentioned in the previous chapter, to gaining support for changes to the economic environment. To overcome this, the small working group can identify the likely sources of resistance and interact on an individual level to try to bring about a higher level of understanding.

“The real road blocks to community development may be in the human relations areas. But the real potentials for community development can also be found in these areas” (Gabriel, 1993).

Assume that the dynamics of the committee will change as they pursue their objectives. At least one individual knowledgeable about planning and development should be involved, at least in the initial stages, to get the group off and running. This planner should explain what is needed from the working group and should ensure that the work does not become enmeshed in small talk about the economy in general, but directed towards seeking to solve the community's real economic problem – too much economic dependence on Ft. Leonard Wood.

The process of choosing the committee members and getting from the initial meetings to an end product that will be presented to the community is a challenging task. In the end, some members will be less enthusiastic than when they started and some will be more enthusiastic. Some members will grow more optimistic, some will grow more pessimistic. When the committee presents their findings the community will only see the end product and will not have a feel for the input and knowledge that went into determining what the goals and objectives are.

A study group exploring a problem may be headed for serious disappointment when it is unable to gain acceptance of its findings. Facts, as important as they are, do not necessarily change opinions. Education of the community is not achieved by sales techniques. Influential people appointed to the [diversification] committee may lose influence when the community fails to understand the report. In fact, influentials may lose influence with people who have an interest in the issue, but who have been bypassed by the committee. Good citizens with a reputation for honesty, good judgment and integrity are vital to a [diversification] committee. However, their reputation may undergo change in a rapidly changing community, especially if the report is sprung on the people (Gabriel, 1993).

Therefore, the committee would have to be creative and focus on alleviating suspicions among those who were not involved in the process but have a stake in the outcome. The work of the committee should never be held as a secret, and the findings should be put to the public in a manner that is clear and concise and that will invite feedback. Any false rumors should be

quickly corrected. It is important to remember that the entire community has a vested interest in this process. There are numerous methods and theories involving ways to incorporate what the public wants and believes into a workable plan of action. The committee should not get bogged down in figuring out the absolute best process. The important thing is to make decisions and proceed to the next steps. For example, one way to determine what industries might be a fit in the county's economy would be to study the existing economic base. If we gather and analyze enough data we can get a pretty good idea of the direction in which we should head.

Once the goals, objectives and direction are determined the committee will select a working group to set up and implement the diversification plan. The working group will be selected by the committee and can include some of the same members but should include additional participation from individuals not on the committee. The working group will be responsible for the more practical aspects of the process, such as applying for the federal grants and selecting participants for the various development programs. This group will establish means to obtain input and feedback from community organizations, the local chamber of commerce, business leaders, political leaders, and others. The committee will monitor the diversification progress and otherwise assist as needed.

One of the ultimate objectives of diversification is to create or increase a community's adaptive capacity. Increasing the adaptive capacity means that the diversification process should not completely depend on attracting "old economy" industries but should also look forward to see what "new economy" industries might work in the county, such as biomedicine, alternative energy sources, information technology, etc. The community can then use multiple approaches in devising methods to create an environment that is conducive to the formation of these newer growth industries. The approaches utilized should also be broad-based and considered as having a lasting impact, leading to increased capacity in the community. Establishing links with emerging industries will help promote the viability of the community far into the future. In addition, the economic development plan should be seen as one means available to help make

businesses and industries more productive.

Thus, the diversification plan for Pulaski County will be started by first analyzing the resources of the county, including its human capital. This is one part of the plan that will be unique for each community since no two localities have exactly the same resources. Each community needs to take advantage of whatever competitive advantage it has, whether it is a university, air/sea port, interstate highway, attractive scenery, or even a military base.

In pursuing an expansion of its overall capacity, the county should make sure it holds on to or enhances what it already has. Perhaps there are things that could be done to make the schools more competitive, for instance, or there could be firms that need help with marketing. Existing human capital should be considered. Some workers retiring from federal service might wish to continue working elsewhere. Workshops could be set up to help those workers make that transition. Improving the quality of the current workforce is an efficient way to help the profitability of current industries and it will help the county achieve its long term economic development objectives.

In retaining its current assets, the county should also look at the capital that leaves the community. Encouraging residents to purchase goods and services from within the county can help with this. A move to decrease utility costs can contribute to keeping money from leaving the area, particularly electrical costs since the county does not own its own energy supply.

In pursuing a plan for economic diversification, obtaining the funds to implement initiatives quickly becomes an issue. As part of an act passed by congress and implemented by the Department of Defense through its Office of Economic Adjustment, defense dependent community diversification would have access to some funds. The OEA claims that it has never denied any community assistance that has asked for it under the OEA's current charter, so it would be expected that they would be as helpful under their new charter. Therefore, the federal government would be one source for the community to turn to for funds. The state and local

governments might also make some resources available. Any outside capital will be a positive factor.

The Pulaski County Economic Base

In broad terms, when we speak of a community's economic base we are referring to the way in which the residents of that community make their living. It is the jobs that are available and the income produced from those jobs that determine the current productivity of a local economy. This is the focus of the effort when we set out to diversify an economy. It is the basic economic activity that determines whether that economy grows or declines or remains steady. Employment and income are the most basic measures of economic activity, and their data are the easiest to locate when studying county level economics.

Following the model established in the last chapter, we have established the legal framework and the diversification committee. In order to address defense dependence in Pulaski County the committee would analyze the county's existing economic base. Consultants, including the University of Missouri, can help with the economic analysis. The University's Department of Community Development has compiled population and employment data on nine Midwestern states that will serve as a baseline in this paper for determining development potential in Pulaski County.

The committee will determine what comprises the economic base of Pulaski County. Base multipliers and economic base computations can be used to reveal the strong points as well as the weak points in the county's economy by comparing its economic base to that in similar communities. It also shows what the impact is likely to be of an actual change in the economic base upon various sectors of the economy (Braschler, et al., 1993).

To help in its evaluation, the committee can divide the county's economic output into three categories: basic, non-basic, and mixed. This categorical division can provide simplified information on the county's economic output. Citizens can easily see how much of the area's

basic employment is connected to one industry - the defense industry in this case. Citizens can also comprehend the composition of the county's main sources of employment and income (Braschler, et al., 1993). Seeing for themselves will help the local citizens understand the dynamics that shape their economy and help them understand why they should favor diversification.

Typically every area will have firms that are in business to make products or provide services primarily for people who do not live in the area. For example, in rural counties such as Pulaski, the majority of the agricultural products and manufactured goods are probably sold outside the county. Industries that engage in selling their products or services outside the county will be referred to as the basic industries because they bring money into the community from elsewhere. Businesses that only sale goods or services to people within the county will be referred to as non-basic. When a business engages in a combination of basic and non-basic enterprise, gaining support from inside and outside customers, it is called a mixed industry (Braschler, et al., 1993).

For the purpose of analyzing the Pulaski County economy, assume that all employment and income in farming, agricultural services, forestry, fisheries, mining, and manufacturing are in the basic category, or export oriented. Income earned from the federal government, social security benefits, transfer payments and residents commuting to work outside the county also are all considered totally basic because they bring outside money into the community.

Some food retailing can be considered mixed. To the extent that agricultural products are grown and sold outside of the county, they are basic. In fact, the majority of the agricultural production of a small, rural county is sold to processors and distributors outside the county. Some are sold locally through direct marketing such as at farmer's markets, but generally those quantities are not enough to affect the overall analysis. The same can be said for manufacturing plants that are operated in rural areas with small populations, as well as for mines and federal government employment. Some of the products these industries produce are "consumed" in the

county but most of it is sent elsewhere.

Social security recipients are also considered to be in the basic category since their incomes come from outside the community (the federal government). The same goes for commuters since they work outside the county and bring income into the county. In mixed sectors, jobs that are created or income produced that is in excess of local needs contributes to a community's economic base. When an industry comprises a large percentage of the total basic economic output of a community, the larger percentage tends to indicate more of a dependency on that sector. A method that can be used to measure the Pulaski County economic base is to perform a sector by sector comparison of its employment and income with that of similar communities in the Midwest.

The percentage distributions (group averages of the nine-state mid-west study area) of employment and income, including social security recipients, transfer payments and those who commute to work, are displayed in Table 5 below. For each industry represented, the percent distribution is the average percent that industry comprises of the typical local mid-west economy for employment and income respectively. The table contains 15 major categories including social security payments and commuters. For example, farming accounts for an average of 8.1 percent of employment and an average of 6.0 percent of income in the counties surveyed. The values presented are a group average of employment or income, which are key values used in computing basic employment and income in individual communities.²⁵

²⁵ These group averages are based on the typical conditions in 439 non-metropolitan counties in a nine-state mid-western region. The statistical analysis done on the counties surveyed for tables 1 through 5 was tested by the University of Missouri and the results were found to be accurate and suitable for practical purposes.

Table 5. Employment and income group averages and multipliers for mid-western non-metropolitan counties.²⁶

	Employment		Earnings	
Economic sector	Group average percent distribution	Multiplier for Basic Change	Group average percent distribution	Multiplier for Basic Change
<i>Totally basic industries</i>				
Farming	8.1	0.77	6.0	0.77
Agricultural services, forestry, fisheries	0.6	0.12	0.5	1.13
Mining	1.0	0.67	1.7	0.63
Manufacturing	10.3	0.54	14.6	0.72
Federal government	2.1	0.34	2.2	0.21
Transfer payments or Social Security recipients	28.3	0.75	20.0	1.17
Commuters	7.5	0.23	6.5	0.49
<i>Mixed Industries</i>				
Construction	3.0	0.55	4.1	0.26
Transportation, communications, utilities	2.8	0.85	4.9	1.32
Wholesale trade	2.5	1.86	3.1	1.83
Retail trade	9.8	0.38	6.6	0.36
Finance, insurance, real estate	3.3	0.41	2.3	1.32
Services	12.5	1.10	3.7	1.25
State and local government	8.2	0.93	8.5	1.00
Dividends, interest and rent (adjusted)	NA	NA	15.3	1.45

Table 6 below presents general information that can be used to analyze the employment base for Pulaski County. The table illustrates the essential elements of a

²⁶ Source: Decongesting Metropolitan America, University of Missouri Department of Community Development (1999).

simple base analysis for the county. The committee can use this worksheet as a guide for such an analysis, given the information included in columns 6 and 7. The data in table 6 below was compiled for Pulaski County. The group average in the table was taken from Table 5. The basic industries are included in the top of table 6 and the mixed industries are in the bottom of table 6 (there really are no strictly non-basic industries).

Table 6. Calculation of basic and non-basic employment for Pulaski County.²⁷

Column 1	Column 2	Column 3	Column 4		Column 5	Column 6	Column 7	Column 8
<i>Basic industries</i>	Employment in study area	% of total employ. (Group average)	Allocation to Basic employ.		Basic employ.	Percent basic	Non-basic employ.	Percent N.B.
Farming	584	8.1	All	=	584	3.7	0	0
Agricultural services, forest, fisheries	80	0.6	All	=	80	0.5	0	0
Mining	10	1.0	All	=	10	0.06	0	0
Manufacturing	1002	10.3	All	=	1002	6.3	0	0
Federal government	3104	2.1	All	=	3104	19.6	0	0
Social Security	1257	28.3	All	=	1257	7.9	0	0
Commuters	804 ¹	7.5	All	=	804	5.1	0	0
<i>Mixed Industries</i>	Employment in study area	Group average times total ² employment	Employment if typical		³ Enter if positive			
Construction	527	3.0% x 15871	= 476		51	.32	476	3.0
Transportation, communication and utilities	587	2.8% x 15871	= 444		143	.9	444	2.8
Wholesale trade	174	2.5% x 15871	= 397		0	0	174	1.1

²⁷ Source: Decongesting Metropolitan America, University of Missouri (1999).

Retail trade	2685	9.8% x 15871	= 1555	1130	7.1	1555	9.8
Finance, insurance, R.E.	600	3.3% x 15871	= 523	77	.49	523	3.3
Services	3088	12.5% x 15871	= 1984	1104	7.0	1984	12.5
State and local government	1369	8.2% x 15871	= 1301	68	.42	1301	8.2
Total employment	15871			2573	16.23	6457	29.4
¹ Number of people who commute to work outside of the county. ² Total employment. ³ Positive figures entered under Basic employment. Negative figures represent the number of jobs less than the group average for the industrial category.							

In analyzing Table 5, we see that the industry categories are listed in column 1. Each industry listed could be a heading for smaller sub-industries to provide a more detailed breakdown. For the purpose of this paper, however, the given level of detail will suffice. The number of people actually employed in each industry is provided in column 2. The group average percentage distribution in column 3 shows the average of that sector's employment in the mid-western group of similar counties. The group average figures are important because they allow Pulaski County to compare its employment in an industry with that of the average of similar counties.

The basic employment for each mixed industry in column 5 was obtained by multiplying the total in column 3 by Pulaski County's total employed population of 15,871. In the retail trade sector, for instance, we multiply 0.098 by 15,871 to find that 1,555 people would be expected to have a job in the retail trades industry in the county. We can then compare this number to the number of people actually employed by comparing the difference between column 2 and column 4, and find that there are 1,130 more people employed in the sector than the average for other mid-western non-metropolitan counties.

Since the actual number is larger than the expected number, this suggests that Pulaski County is relatively high in retail trade employment. This might indicate that the retail sales area

is more than meeting local needs and is attracting dollars from outside of the community. This is positive in terms of building the economic base. Of course more in depth studies could be done to determine what types of retail sales are actually in the area and then determine which have more or less than the regional average. If the actual number was less than the expected number, such as that indicated for wholesale trade in Pulaski County, it would suggest that the community is relatively low in that particular employment sector and is probably not meeting the needs of the county. Therefore, some of those in need of those goods or services would purchase them outside of the county, which detracts from the local economic base. In that case, that sector would become a target for increased economic output. The table above leads us to investigate the wholesale trade industry more thoroughly to determine what possibilities exist for new businesses in that area.

The same process can be used for each of the other sectors. The remaining sectors show that the actual numbers employed in those sectors in Pulaski County's economy is higher than the average. These higher than average numbers in column 5 are what make up the total economic base of the county. In the analysis it should be remembered that mixed industries contain both basic and non-basic components.

Once we find the difference between the actual and expected employment for each industry, we can add the positive figures in column 5 to find the total basic employment, which is 2,573. This means that Pulaski County has a total of 2,573 more employees in those mixed industries than the average county. This translates into 2,573 employees working to bring in dollars from outside of the county, similar to basic industries.

In Pulaski County, the federal government, manufacturing, and social security are the most important basic industries. These industries account for 78 percent of employment in sectors that are considered entirely basic. In the mixed industries, all except wholesale trade provide a larger than typical contribution to employment. Services, retail trade, and state and local government account for the bulk of those industries. With regards to each individual

industry's contribution to the economic base, the federal government accounts for 19.6 percent of all employment and 45 percent of basic employment. Since basic employment is the key to a strong economic base, Pulaski County is heavily dependent upon the federal government for employment. Those Federal Government employees work at Ft. Leonard Wood.

Wholesale trade is the only industry shown that provides less employment than the average for similar counties. This suggests that local leaders might look for ways to increase employment in that industry.

Defining the meaning of the data obtained from these tables is intended to give local leaders and citizens some idea of how they can analyze their economic base and use a simple base analysis. Those who actually take on the process of diversification should be able to invoke more accurate interpretations of the data since they are more familiar with the nuances of their own local economy.²⁸ A similar process can be undertaken for computing income.

This process can help Pulaski County determine which industries it should seek to attract or expand in order to create a more stable and diverse economy. After identifying industries that would be helpful to that end, the leaders can then determine the best way to establish or expand the industry in the local area. Other studies and analysis can be done to determine the feasibility of establishing an industry that does not currently exist in the county, such as the high technology industry.

Multiplier Effects

By using the data from Table 5 we can obtain some idea of what the multiplier effects would be of new jobs established in a particular industry. The multipliers provide an estimate of the additional employment in non-basic or mixed sectors of the economy for each new worker

²⁸ The same kind of worksheet is used for analyzing income data with the addition of a sector for dividends, interest and rent, which accounts for 15.3 percent of total income for the counties studied. Copies of both types of worksheets are shown in the publication *Foundations of an Economic Base Study*, available from the University of Missouri Department of Community Development.

added to the basic sector employment roll. Table 5 shows columns headed "multipliers for basic change" for employment and earnings. These multipliers are intended as a tool to predict the impact of changes in basic employment and/or basic income. (Braschler, et al., 1993). This can help show the community what would likely happen if certain eventualities occurred. Hypothetical numbers can be plugged in for any sector to see what the impact would be on any other sector or on the economy in general.

Table 5 also shows the average employment and income distribution for the mid-western communities. This impact will not necessarily occur at once, and in fact, could take years for all of the impacts to occur. (Braschler, et al., 1993). We can see in the worksheet below that if we increase the number of employees in federal government jobs by twice the existing amount, or by 3,104, we cause an average of 2,080 jobs to occur in the non-basic sector, thus bringing the total number of new jobs to 5,184. This multiplier effect reveals at least two significant things. First, we get a more complete view of the impact of basic employment on the economy. Second, we see that the dependence on defense spending in Pulaski County is even greater than would be presumed by only looking at the number of people working directly for the federal government. If an additional 3,104 people hired by Ft. Leonard Wood creates 2,080 non-basic jobs, then the existing 3,104 employees are likely supporting a similar number. The fact that the military contributes over \$550 million to the regional economy tends to support that finding. We also have to keep in mind that when discussing employment here, we are only dealing with civilian employees. We have not taken into account the over 9,000 active duty military personnel and the ancillary employment they support.

At any rate, a similar analysis can be done for the mixed sectors, looking individually at those with more employees than the group average, those with less than the group average, and at social security. To the extent that mixed sectors increase non-basic employment they tend to also cause an increase in the population.

Table 7 below shows examples for services, wholesale trade, and social security. It

shows what the increase in population would be if 100 employees were added to the services industry, 250 added to the wholesale trade sector, and if 30 more people were added to the social security rolls in Pulaski County. With an employment multiplier of 1.10, the 100 new employees in the services sector would add 110 non-basic employees for a total employment of 210. With a population multiplier of 1.23, the net increase in the county's population due to this increase in the services sector would be expected to reach 258 people.

If 250 people were added to the wholesale trade industry in Pulaski, which currently has less than the average county, with a multiplier of .38 there would be 11 people added to the non-basic payrolls. The total new employment would be 261 people. With the population multiplier of 1.23, the expected increase in population would be 321 people.

Table 7:²⁹ Calculation of employment impacts with basic growth.

	Example of growth sectors (Total county employment in all sectors = 15,871)			
		Mixed sector growth		
Item	Totally basic sector	More than group average	Less than group average	Social Security recipients
1. Sector name	Federal Government	Services	Wholesale Trade	Social Security
2. Total employment = 6277				
3. Mixed group average		0.125	0.098	
4. Expected non-basic employment (line 2 x line 3)		1984	397	
5. Actual employment		3088	174	
6. Subtract line 4 from line 5		1104	-223	
7A. New employment	3104	100	250	NA
7B. New Social Security	NA	NA	NA	30
8. Enter line 6 if negative, 0 otherwise	0	0	-223	0

²⁹Source: Decongesting Metropolitan America, University of Missouri (1999).

9. Subtract line 8 from line 7A or 7B; If negative, enter 0	3104	100	27	30
10. Enter multiplier (from Table 1)	0.67	1.10	0.38	0.75
11. Additional non-basic employment (line 10 x line 9)	2080	110	11	23
12. Add lines 7A and 11 for total new employment	5184	210	261	23
13. Enter population multiplier, employment (from Table 2)	1.23	1.23	1.23	1.23
14. Total additional population, employment (line 12 x line 13)	6376	258	321	28
15. Enter population multiplier, Social Security (from Table 2)	NA	NA	NA	2.07
16. Total additional population, Social Security (line 15 x line 7B)	NA	NA	NA	62
17. Total additional population, employment (add lines 14 and 16)	6376	258	321	90

Economic stability is a means to the ultimate end of achieving community stability and long term viability. A strong, stable, and diverse economy helps protect a community's future. Being able to generate more jobs makes the area more attractive to potential residents and investors. If the area's residents are fully employed, new employees will move in from elsewhere and the population will increase. For example, using the population multiplier of 1.23 for employment change (see Table 6), the 2,080 new non-basic jobs combined with the 3,104 new federal government jobs could possibly increase the Pulaski County population by 6,376 people. In areas where there are sizable numbers of unemployed people or under-employed people, the number used as the multiplier would need to be adjusted down. Since Pulaski County's unemployment rate is 6.2%, the population would probably not show any marked increase until the employment rate increased, assuming those who are out of work are individuals who are employable.

This connection of population change with changes in the level of employment also

works in the reverse. If jobs are lost in basic employment and the community does not respond quickly, the population will decrease accordingly. However, before the population actually drops, there will likely be periods of high unemployment or under-employment.

Even though we focus on basic employment and income in studying local growth, the trades and services industries should be established so that they can be in a position to take full advantage of the multiple benefits of the growth. Employment in the mixed sector should be at least as much as predicted; otherwise it is likely to be falling short in meeting the demands of the local community. (Braschler, et al.,1993).

After going through this process for each sector in the county, the committee can then direct the working group to expend efforts toward expanding, retaining, or establishing industries that will lead to probable economic development and stable growth.

Selecting target industries

Once the committee determines the sectors it wants to influence it can then pursue further analysis. Eventually it will be turned over to the working group to decide what method to use to attract, establish, or expand those industries. For example, let us say that Pulaski County determines that it will seek to establish more different types of retail stores in order to keep a larger portion of its residents' money in the county. The working group can thoroughly analyze the retail trade sector as it exists. The group would then have to determine the kinds of retail establishments it could support as well as the anticipated number of employees and skills needed. The group would also have to determine whether any existing businesses would be affected by increased competition or otherwise. It would also study the existing businesses to see if any of them are ripe for expansion.

Using the most recent population data (including rural population density) for Pulaski County, and the maximum market range of the county's retail trades, along with information

available from Dunn and Bradstreet and the University of Missouri, the working group can proceed to the next step, which is to determine which retail establishment is more suitable for Pulaski County. The group has to look at what already exist and then at what the county can support.

Albertsons Supermarket and Wal-Mart are the two largest existing retailers in Pulaski County. These companies represent national chains that presumably did considerable research before deciding to locate outlets in the area. Information compiled by the working group can be used to recruit retailers, to help someone new to the industry start up, or to convince an existing retailer to expand its operations.

In order for any business to remain a going concern there needs to be a market for the goods or services it distributes. Conversely, whether or not there is a market depends upon the location of the business. A retailer must know that there will be a minimum number of potential clients for its products. The number of potential clients or customers needed depends on the type of business.

Consumers will typically travel only a predictable distance to purchase a product at its regular price. Having to travel further to buy a product increases the cost of the product to the consumer. The further one travels the higher the cost of the product becomes. People will travel longer distances to buy more expensive items. An individual will probably travel much further to purchase an automobile than they would to purchase a gallon of water, for instance. From this example it becomes obvious that the range of an automobile market is much greater than the range for a gallon of water.

Additionally, it is often more efficient to group certain retail establishments in clusters, such as at malls, while others do better out on their own. Population and demographics tend to dictate the types and quantities of retail stores that exist in an area. For example, specialty shops, such as cigar "shoppes" or establishments like Sharper Image, tend to appear almost exclusively in relatively high population areas.

Keeping in mind that the objective is to wean the community off of its strong dependency on the military base, economic developers must resist the temptation to place businesses in a location that will cause them to immediately develop a dependency on money flowing from the military base and its personnel, thereby reinforcing instead of weakening the dependency. So establishing enterprises that cater to base personnel is not the ideal means of achieving a diverse economy that can withstand contractions in defense spending.

Typical trade areas for non-metropolitan towns in Missouri, Arkansas, and Oklahoma were mapped in *Decongesting Metropolitan America* (1999) from which tables 4 and 5 below were obtained. The businesses were listed according to their Standard Industrial Classification (SIC) code. There are other dynamics that go into selecting the location of a business, such as the strength of competitors and the demand for a product, but this type of analysis gives us some idea of the geographic area and population size that we should look for. Table 8 below shows the maximum market area for various types of retail establishments based on population and geographic location.

Table 8 shows the percentage of non-metropolitan towns in the three-state area, by market area sizes, having one or more firms in selected retail trades. The table presents the various retail industry types along with the recommended market areas. As an example, we see ³⁰that only 8 percent of the towns had flower shops within an eight mile or less radius. However, 68 percent of the towns had a flower shop within a 16 mile radius. From this we can deduce that the probable market range for flower shops is 16 miles. Another way to state this is to say that customers will be willing to travel 16 miles to buy flowers. We can also see that 97 percent of the towns had a flower shop within 32 miles. But keep in mind that the 16 to 32 mile trade area includes the 8 to 16 mile trade area.

³⁰Source: *Decongesting Metropolitan America*, University of Missouri (1999).

Similar data can be compiled on more advanced new technology companies, such as computer hardware and software centers.

Table 8: Selected Retail Trades Market Areas

Industry Type	Recommended Market Area			
	0 to 8 miles	8 to 16 miles	16 to 32 miles	32 to 64 miles
Building supply and lumber	24	87 ¹	99	100
Paint, glass and wallpaper	2	22	71 ¹	95
Hardware	22	73 ¹	94	95
Lawn/garden and nurseries	6	22	46	52
Mobile homes	4	22	70 ¹	86
Big box department stores	2	25	61	86 ¹
General merchandise	43	83 ¹	95	95
Food markets and groceries	62	98 ¹	100	100
Automobile dealers, new and used	7	82 ¹	100	100
Used car sales	5	44	76 ¹	90
Home and auto supply stores	14	84 ¹	99	100
Boat dealerships	2	17	49	71 ¹
Recreation vehicle dealers	1	6	22	48
Motorcycle sales	1	9	59	90 ¹
Male clothing stores	2	38	89 ¹	100
Women's clothing wear	9	74 ¹	99	100
Children's and infants' wear	1	16	62	71 ¹
Shoe sales	4	50	95 ¹	100
Furniture retailers	14	75 ¹	99	100
Flooring stores	4	29	73 ¹	90
Drapes and upholstery	1	5	20	48
Home appliances	7	45	89 ¹	100

Television and stereo stores	8	46	90 ¹	95
Music and DVD stores	1	13	66 ¹	95
Pharmacies and drug stores	19	91 ¹	100	100
Sporting goods and bike shops	7	38	82 ¹	90
Book shops	1	7	46	76 ¹
Stationery and paper stores	0	9	47	71 ¹
Jewelry shops	4	58	96 ¹	95
Hobby shops and toys	1	9	23	67 ¹
Souvenir and gift shops	6	37	81 ¹	90
Sewing and needlework	7	47	71 ¹	90
Flower shops	8	68 ¹	97	100
¹ Probable market range for business type.				

Among other things, these data can be used to help prospective entrepreneurs conduct feasibility studies. It can also be used to determine the best location for a business that will attract customers from outside the county, thereby contributing to the basic economy and strengthening the economic base. Planners familiar with geographic information systems (GIS) can be instrumental in helping to select the most ideal location for new or expanding businesses. By seeking to draw more patrons who have no financial connection with Ft. Leonard Wood, the enterprises will develop with less dependence on the military economy. It cannot be asserted that such firms will feel no impact from a decrease in defense spending in the area, but the impact they absorb will be much less severe than it would be for businesses almost totally dependent on the base.

Along with the geographic location of the market, there must be a sufficient population in the area to support businesses. For the same retail industry categories as

given above, table 5 below shows the median populations that support either one, two or three firms of a given type.³¹ Towns that only had one flower shop, for instance, had a median population of 1,848 people in the town and 7,079 in the total market area and two employees. Towns that had two flower shops had a median population of 3,717 and 12,796 in the total market area and 6 employees. One could also say that a town with 3,709 people should be able to support one hardware store. For some retail industries it is apparent that two firms would require a significantly higher population than would a single firm in the same business in order for both to be profitable. Television and stereo stores are good examples of this phenomenon. One store requires a (median) population of 5,952 people for the entire market area. However, two stores require a population of 20,056, over three times as many.

Table 9.³² Median population of non-metropolitan towns and market areas and median employment by number of companies in selected retail trades:

	Towns with <i>one</i> company			Towns with <i>two</i> companies		
	Median Population:			Median Population:		
Industry Type	town	Total market area	workers	town	Total market area	workers
Building supply and lumber	915	2,595	4	2,129	8,748	10
Paint, glass and wallpaper	3,103	11,528	2	7,831	23,220	5
Hardware	959	3,709	2	2,330	9,925	6
Lawn/garden and nurseries	1,736	5,845	3	4,017	20,082	7
Mobile homes	2,944	11,625	3	3,907	19,553	6

³¹ In calculating the population of rural market areas associated with individual towns, the market area was restricted to 16 miles or less even if the town was drawn from the larger market range of 32 or 64 miles for some of its businesses. If the town drew from a very small market area, those having a market range of 8 miles or less, the market area used was 8 miles, not 16 miles.

³² Source: Decongesting Metropolitan America, University of Missouri (1999).

Big box department stores	3,103	11,626	6	10,057	51,221	30
General merchandise	385	1,536	2	683	2,147	5
Food markets and groceries	329	1,250	2	575	1,883	6
Automobile dealers, new and used	1,234	4,761	7	1,990	8,266	19
Used car sales	2,137	9,642	2	3,230	14,290	4
Home and auto supply	1,083	4,000	2	1,863	7,307	6
Boat dealerships	3,496	12,887	2	NR ¹	NR	NR
Recreation vehicle dealers	6,689	19,574	2	NR	NR	NR
Motorcycle sales	5,000	31,485	2	10,500	49,948	7
Male clothing stores	2,355	9,798	3	5,201	20,452	7
Women's clothing wear	1,325	5,449	2	2,369	8,680	5
Children's and infants' wear	5,057	18,633	2	NR	NR	NR
Shoe sales	2,268	10,352	2	3,729	15,781	5
Furniture retailers	1,173	4,013	2	2,553	9,297	7
Flooring stores	2,100	8,806	2	5,784	31,034	6
Drapes and upholstery	4,443	20,178	2	NR	NR	NR
Home appliances	1,812	7,802	2	3,469	15,214	5
Television and stereo stores	1,467	5,952	2	3,757	20,056	5
Music and DVD stores	5,420	23,442	2	8,203	42,382	4
Pharmacies and drug stores	957	2,939	3	2,106	8,702	9
Sporting goods and bike shops	1,831	6,932	2	3,729	16,326	4
Book shops	7,831	41,478	2	NR	NR	NR
Stationery and paper stores	7,948	40,424	4	NR	NR	NR
Jewelry shops	2,027	9,151	2	4,745	19,574	5
Hobby shops and toys	3,885	17,085	2	NR	NR	NR
Souvenir and gift shops	2,112	9,131	2	4,684	17,084	4
Sewing and needlework	1,922	8,261	2	3,942	19,173	5

Flower shops	1,848	7,079	2	3,717	12,796	6
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¹NR indicates that either few towns had these types of companies or the population drawn from was too spread out to be of any use in this survey.

Industry type	Towns with <i>three</i> companies		
	Population:		workers
	town	total market area	
Building supply and lumber	3,278	12,854	15
Paint, glass and wallpaper	9,923	54,047	8
Hardware	3,839	15,818	11
Lawn/garden and nurseries	NR ¹	NR	NR
Mobile homes	NR	NR	NR
Big box department stores	NR	NR	NR
General merchandise	1,763	7,662	9
Food markets and groceries	1,030	3,575	11
Automobile dealers, new and used	2,515	11,197	27
Used car sales	NR	NR	NR
Home and auto supply	2,998	12,719	10
Boat dealerships	NR	NR	NR
Recreation vehicle dealers	NR	NR	NR
Motorcycle sales	NR	NR	NR
Male clothing stores	7,311	45,747	11
Women's clothing wear	3,543	12,643	8
Children's and infants' wear	NR	NR	NR
Shoe sales	6,056	20,426	9
Furniture retailers	3,021	12,530	11
Flooring stores	NR	NR	NR
Drapes and upholstery	NR	NR	NR
Home appliances	5,340	18,673	10
Television and stereo stores	7,125	34,707	8

Music and DVD stores	NR	NR	NR
Pharmacies and drug stores	3,362	11,923	17
Sporting goods and bike shops	5,463	44,973	6
Book shops	NR	NR	NR
Stationery and paper stores	NR	NR	NR
Jewelry shops	7,967	42,382	10
Hobby shops and toys	NR	NR	NR
Souvenir and gift shops	6,630	20,725	6
Sewing and needlework	5,211	23,220	7
Flower shops	7,429	18,286	9
¹ NR indicates that either few towns had these types of companies or the population drawn from was too spread out to be of any use in this survey.			

We can use this data to determine what type of retail industry is appropriate to help diversify the economy of Pulaski County. For simplification, we will use the County's current non-military population of 27,499 as the potential market, keeping in mind that for the purpose of expanding our basic economy we would also want to attract dollars from outside the county. By using the county's population density of 70.4³³ people per square mile and its total land area of 547 square miles, we can determine which retail sales industries have a potentially profitable market.

The population of the market area for the 32 mile range will be assumed to be the civilian population of the county – 27,499 people. With the population density of 70.4 people per square mile, we can use tables 8 and 9 to compare Pulaski County's market population with the median population size for the towns compiled in the tables. Limiting the market range to the area covered within the county's borders will help determine the non-basic needs. To determine the basic capacity we would extend the market area to beyond the borders, thereby capturing some of the market outside the immediate area and expanding the economic base. Since we are trying to

³³ As reported in OSEDA <http://www.oseda.missouri.edu/counties/population>, Feb 2002.

establish industries that can withstand defense spending cuts, we should discount the business income that would be expected to be derived from Ft. Leonard Wood. For the purpose of devising a diversification plan, we can pretend that the base and its transient population do not exist. By doing that we can better predict which businesses can thrive without the assistance of defense spending.

Referring back to tables 8 and 9, we can see how Pulaski County's market population for the (32 mile) range compares to the median population for specific retail industries. Looking at table 8, the probable range for there to be a hardware store, for example, is within 6 miles. We would expect to see a lawn and garden store within 64 miles; a mobile home dealer within 32 miles; a department store within 32 miles, etc. With a total population of 27,499 people within a 32 mile radius, we would expect for there to be the following numbers of retail establishments in Pulaski County:

Table 10: Number of Selected Retail Outlets Expected in Pulaski County

<i>Industry type</i>	<i>Number expected in Pulaski County</i>
Building supply and lumber	3
Paint, glass and wallpaper	0
Hardware	3
Lawn/garden and nurseries	2
Mobile homes	2
Big box department stores	0
General merchandise	3
Food markets and groceries	3
Automobile dealers, new and used	3
Used car sales	2
Home and auto supply	3

Boat dealerships	1
Recreation vehicle dealers	1
Motorcycle sales	0
Male clothing stores	1
Women's clothing wear	3
Children's and infants' wear	1
Shoe sales	3
Furniture retailers	3
Flooring stores	2
Drapes and upholstery	1
Home appliances	3
Television and stereo stores	3
Music and DVD stores	0
Pharmacies and drug stores	3
Sporting goods and bike shops	0
Book shops	0
Stationery and paper stores	0
Jewelry shops	0
Hobby shops and toys	1
Souvenir and gift shops	3
Sewing and needlework	3
Flower shops	3

If the group finds that there are less than 3 flower shops, for example, then they would recognize that an opportunity might exist in the flower business. In instances where Pulaski County has less companies than would be expected, the working group would determine the

reasons for the shortage. Are local demands for the product or service being met locally, or do people have to go outside the area, taking part of the community's wealth along with them? Perhaps there has been a population growth spurt and the industries simply have not caught up yet. The group would also need to know if there are any unique circumstances that prevent such an industry from thriving in the area. If the group determines that the county is ripe for a flower shop, then the next step would be to select a means to establish or expand that industry. This process would be repeated with each industry where there are fewer firms in the county than would be expected. Again, the group has to be cognizant of the effects new or expanding businesses will have on existing businesses and on the community in general. Transportation modeling and land use modeling can be used to help predict some of the future impacts. Building models using linear programming can be utilized to look for optimal development solutions or to determine the best mix of businesses.

Once the working group has identified industries which they believe can achieve long term diversification of their economy, they can proceed with obtaining the necessary backing to establish, attract, or expand those industries. If the group determines that federal funds are needed then it will contact the OEA, perhaps through a state agency, to apply for assistance. The types of enterprises the community chooses to pursue will determine its economic development strategies from this point. It can select from the full range of economic development tools described in the previous chapter. If, for example, the county decided that it wanted to establish a new technology sector then it might consider using federal funds to create a high tech business incubator. If the county wished to assist some of its low income residents with starting up their own businesses then they might consider establishing a micro-enterprise program.

The working group might see tourism as a means to attract more people to the county and thus increase its basic economy by bringing in outside dollars. The state of Missouri has recently launched an advertisement campaign to attract visitors to the state. With the current fear of traveling overseas, Pulaski County can tap into the tourist market, especially given the quality of

the scenery in the Ozark area. Again, the main point is to grow industries that can thrive without the benefit of defense spending. The county might also find out which industries currently have the least dependence on the military base and launch an effort to ensure that those enterprises remain in the county.

Missouri is encouraging localities to shift into the "new economy." The state sees future economic growth being spurred by knowledge based sectors such as telecommunications, information technology, and services. At the state level, the government sees the ability to adapt to the new economic environment and to be open to change as essential to success.

The Progressive Policy Institute and the National Governor's Association for Best Practices have identified what it believes to be steps to developing workable strategies to adapt to the new economy (Missouri Secretary of State, 2002):

- Invest in people; creating a skilled workforce;
- Nurture entrepreneurs; they are the drivers of the new economy;
- Provide state-of-the-art infrastructure;
- Collaborate to create high-tech clusters;
- Create a customer-oriented government;
- Streamline government taxes and regulations;
- Enhance the quality of life in communities.

Missouri has bought into this philosophy, establishing policies and programs to help local areas. The Missouri Economic Research and Information Center (MERIC) has the job of identifying strategies to determine the best practices for adapting to the new economy. MERIC studies what has been tried in other states, including workforce training initiatives, and reports on the outcomes, with their goal being to guide state policy makers to implement innovative programs for Missouri (MERIC, 2002). The working group can exchange information with

MERIC obtaining data on Pulaski's efforts with defense economic diversification and the working group obtaining information about other states. Missouri can see that the diversification process in Pulaski County is an innovative program addressing issues of concern to the state level. Helping move into the new economy would certainly be a part of the diversification plan, and it can help the state answer the challenges of the new economy.

The state can also assist Pulaski County with its diversification plan through the University of Missouri Outreach and Extension programs. These programs are available through the University of Missouri campuses in Columbia, Kansas City, Rolla, and St. Louis, with extension activities available at Lincoln University. There are extension specialists on the scattered campuses as well as in 114 counties who offer several types of education programs that can assist citizens with applying university research knowledge to help overcome challenges in their communities (MERIC, 2002). This is a source available to the citizens of Pulaski County, who can find help with implementing their diversification plan.

The outreach programs offer specialists possessing expert knowledge in specific fields. Through these specialists Pulaski County can obtain assistance in setting up, for example, business incubators, or can get help for entrepreneurs. For instance, business and industry specialists can help write business plans, help improve or create products, develop markets, and help with accounting procedures, among other things. These services are free, or practically so, to new as well as established businesses. As LaDoris Dayne, a grassroots community organizer in the state who is also a member of The National Congress of Neighborhood Women says, "as the paradigm shifts from the delivery of social services to the empowerment of people and the development of sustainable communities, there is a definite need for this practical training" (Missouri Department of Economic Development, 2002).

Another existing program that can assist Pulaski County is the Missouri Community Betterment (MCB), which is a state, community, and private sector partnership program aimed at enhancing the potential of Missouri's communities and the private sector. This program is

particularly relevant since the purpose of diversification is to strengthen the private sector economy. Housed in the state's Department of Economic Development, MCB lends technical assistance to communities and gives recognition to neighborhoods that participate. It is involved in activities relating to human development, economic development, services, and infrastructure. They seek to improve the quality of life in Missouri communities. They recognize that funding from the federal and state governments depends a lot on whether the community applying for a particular program has a strategic, long-term plan in place. A community betterment plan gives assurance to state and federal agencies that any funding provided will have long range benefits (Missouri Department of Economic Development, 2002). MCB can help promote the Pulaski diversification plan as a strategic way to reduce the community's dependence on federal spending and to strengthen the economic base of Pulaski County.

Finally, the Missouri Office of Rural Development offers a Rural Economic Assistance Program (REAP) that will provide seed capital to help encourage community and economic development in rural portions of the state. Its objective is to help enable communities to accumulate the necessary resources that will allow them to pursue long term development objectives. They also provide technical assistance if requested while leaving the direction of the communities' efforts up to the local policy makers. Seven communities in the state have used REAP with each receiving up to \$30,000 each year to hire staff. Communities can only use the program for two years and the locality must provide matching funds for one-third of the awarded amount. At the end of the two year period the community must provide the funding to keep the program going. REAP aims to help communities that already have a good, strong organization in place that is committed for the long term (Missouri Department of Economic Development, 2002).

The Pulaski County Diversification Committee and Working Group, along with economic development professionals and community groups can determine which, if any of the state programs can best assist them in reaching their objectives. Alternatively, the working group

can work exclusively with the OEA. Once the chosen programs are in place and running, the committee should analyze the cost of the programs compared to what economic benefit is being obtained by the community. Those programs that are meeting expectations should be given continued support; those not meeting expectations should be monitored closely and eliminated if it is apparent that they will not succeed. The leadership must be fully committed to the process.

There should be ongoing and continuous feedback. Progress towards creating a stable and viable community with less dependence on defense spending will be continuously assessed. That assessment includes monitoring the amount of the local economy that is directly related to defense spending. After the diversification programs have been implemented, the share of the economy that can be contributed to defense spending should decline noticeably. It is up to the community to determine what the ultimate goal should be in terms of what percentage of the economy will be non-defense related. The measure of success will be the extent to which Pulaski County's economy and community can carry on in the face of any future reduced defense spending.

Where new units moving from Ft. McClellan, Alabama to Ft. Leonard Wood increased the amount of defense dollars directed at Pulaski County, the residents in the community surrounding Ft. McClellan had to deal with the cuts in spending. One day the shoe could very well be on the other foot. Rather than struggling to recover from the economic impacts after the cuts occur, like Killen, Texas, Long Island, New York, and so many other communities, Pulaski can take proactive steps to promote other industries. With successful diversification, the county will remain stable and viable because of its foresight and thoughtful implementation of a planned community economic policy.

Chapter Six

CONCLUSIONS AND RECOMMENDATIONS

Communities that depend on continued defense spending for their economic well-being should diversify their economies. Whether the dependency is based upon a large percentage of the locality's workforce being employed by a single defense contractor or upon the money that a military base generates, dependency on defense dollars increases the community's vulnerability to the cyclical nature of defense spending. Furthermore the stability of a defense dependent community often rest on decisions made from afar regarding the level of funding for a base or defense corporation.

The economic diversification development model presented in this paper is not intended as a prescription that will answer all of the needs of every defense dependent community. Each community is different and will have to discover its own right answers. The model is presented in hopes of giving these communities some direction and guidance. It can be a creative approach with a unique perspective on planning and developing a community. The objective of the concept of diversification is to stimulate dependent communities to take control of their own destinies by increasing their capacities and generally broadening and strengthening their economic base.

We have seen some of the effects defense spending can have on our economy. Defense dollars tend to be less productive with regards to impacting economic growth. It is for us as a nation to realize that there is an optimum level of the country's budget that we can devote to spending on defense and still maintain or improve standards in other areas of our society. Perhaps we have already gone beyond that optimum limit. The United States is by far the most militarily dominant country in the world, however, we continue to have severe social and

economic problems in our communities. Perhaps if we were to make the commitment to other facets of our society, such as education, health care, or the environment, as we have consistently made to defense over the years, then we could also attain superior standards in those areas. Redirecting some dollars from the defense budget to help the economy of defense dependent communities would seem to be a modest move in that direction. Given the fact that the return on capital if invested in the community is likely to be many times greater than if it were to be invested in defense, there are definite advantages to assisting communities. The advantages are economic as well as social and extend beyond the targeted localities.

Since states have taken on the major role in economic development, congress can support the states' efforts to increase the probability of overall success. Congress can and should help defense dependent communities by allocating more funds to the organizations that are assigned the responsibility of helping localities reduce their dependency. Congress can and should equip the OEA to respond to communities' requests for assistance by amending that agency's charter. The OEA can then provide grants to defense dependent communities before any downsizing or cutbacks occur.

Diversification will help communities avoid the self-correcting mechanisms that are triggered when mass job losses occur. When a community is impacted by numerous layoffs from its one major industry and then by the multiplier effects in the ancillary industries supported by that one sector, workers often have little choice but to seek employment outside the area. Layoffs in these communities can quickly lead to a decline in the overall standard of living. As more businesses close as a result of a shrinking economy the community will lose more of its population. This decline might continue until significant new industries move in.

This report asserts that public policy should intervene to assist defense dependent communities with diversification because the government has in many ways has nurtured the dependency. Like Killeen, Texas, and Pulaski County, Missouri, some communities have either grown up around, or have significantly expanded because of, a defense supported facility.

Dependence provides little ability to adapt to change. Public Policy should intervene before those communities actually have to deal with a drastic cut in their major industry because a community that has a resilient economy tends to also have the ability to withstand a negative economic impact. Waiting to deal with the impact after it actually occurs allows widespread disruption to families and neighborhood life.

The intent of this paper is to propose a policy response that will strengthen the communities' economic foundation. The ability to take advantage of this policy at the local level will determine the ultimate success of the effort. The model diversification plan offers a conceptual framework that favors increasing the capacity of the local economy. While there is no magic formula for success, the model holds that the time for intervention is now, before there is a dire need for an alternative economic impetus. This is not a policy for recovery for a community set into chaos, but one to be implemented while the community has the ability, resources, and time to devise workable programs and to see those programs through to their conclusion.

The programs established by the communities should be formulated with input from the community. This input gives everyone who will be affected by the diversification process an opportunity to take part.

Areas that currently depend on defense spending, and are thereby vulnerable, do not presently qualify for any type of economic assistance. The reason for the lack of available assistance is partly because of the apparent economic success: if the bases or industries are thriving then it might seem counterintuitive to invest more money to diversify the economy of the surrounding areas. But as we have seen, the defense industry is cyclical – bases downsize or close and corporations lose defense contracts.

Defense dependent communities should diversify whether they use the methods identified in this paper or some other means. If there are no funds forthcoming from the federal government then the communities concerned need to take whatever actions are necessary to initiate economic

diversification. This might very well include some other creative ways to bring in different industries.

Successful diversification will lead to better communities. Far from detracting from the nation's military capabilities, investing a relatively small amount of defense dollars into economic development for defense dependent communities will ultimately benefit everyone concerned. The return on the investment will be attractive, stable communities with more economic independence. That independence will allow for easier removal or closure of the defense entity, if that becomes necessary. In the final analysis a pareto superior outcome is the result – many people are better off and no one is worse off.

APPENDIX A:

Missouri State Code, Chapter 251:

1. The conditions under which the governor was authorized to create regional planning commissions:

A regional planning commission may be created by the governor upon petition in the form of a resolution by the governing body of a local governmental unit and the holding of a public hearing on such petition. If the petition shall be joined in by the governing bodies of all the local units in the proposed region, including the county court of any county, part or all of which is in the proposed region, the governor may dispense with the hearing. Notice of any public hearing shall be given by the governor by mail at least ten days in advance to the clerk of each local unit in the proposed region. If the governor finds that there is a need for a regional planning commission, and if the governing bodies of local units within the proposed region which include over fifty percent of the population as determined by the last decennial census of the United States, shall consent to the formation of such regional planning commission, the governor may create the regional planning commission by order and designate the area and boundaries of the commission's jurisdiction, taking into account the elements of homogeneity based upon, but not limited to, such consideration as topographic and geographic conformations, extent of urban development, the existence of special or acute agricultural, forestry, conservation or other rural problems, uniformity of social or economic interests and

values, park and recreational needs, civil defense, or the existence of physical, social and economic problems of a regional character. 251.160 RSMo 1969

2. Explicit declaration that formation of regional planning commissions does not require a referendum:

Notwithstanding the provisions of section 64.530, RSMo, the creation of a regional planning commission and a local unit's participation in and adoption of plans prepared by the regional planning commission shall not require a referendum; provided, however, that this provision shall not extend to the adoption of county zoning laws or regulations under sections 64.620 to 64.690, RSMo. 251.160 RSMo 1969

Missouri now has twenty regional planning commissions. These cover the entire state.

3. Some suggestions as to what comprehensive planning means:

Projects covered. — Comprehensive planning, state and regional, shall include, but not be limited to, the planning for the following:

- Public water systems;
- Stormwater drainage and flood control systems;
- Sanitary sewerage systems;
- Integrated transportation systems;
- Orderly land-use arrangements for residential, commercial, industrial and public and other purposes;
- Local, area-wide and state governmental services coordinated with federal governmental services insofar as may be feasible;
- Solid waste disposal systems or facilities;

- Educational facilities;
- Open space, park and recreational areas;
- Improved standards of community aesthetics and facilities design;
- General living conditions and environmental health;
- Community health and hospital needs and related facilities; and
- The coordination of planning activities for all federal assistance and grant-in-aid programs, which require comprehensive planning as prerequisites for eligibility. 251.180 RSMo 1969

4. Membership on a regional planning commission and remuneration:

Regional commissions — membership — terms — qualifications. —

1. The membership composition of a regional planning commission shall be in accordance with resolutions approved by the governing bodies of the local units in the region representing in the aggregate at least half of the population of the region. For the purposes of this determination, a county shall be as one local unit and the population of such county shall be based upon the inhabitants residing in the unincorporated area of such county as determined by the last decennial census of the United States.

2. Terms of office for regional planning commission members shall be as prescribed in the resolutions of approval; all regional planning commission members shall be electors of the state and reside within the region. 251.250 RSMo 1969

251.250 clearly leaves who shall be a member of the regional planning commission a matter to be decided by the local governing bodies. This authority was in the law and has not been repealed.

However, in 1973 the legislature added an inconsistent proviso in 251.038.

Regional planning commission to include certain state senators and representatives — expenses, how paid. — The regional planning commissions shall include the state representatives and state senators of their region who shall serve without pay but who shall be reimbursed for their necessary and actual expenses incurred from the senate or house contingent fund and shall be invited to all meetings in writing by the regional planning commission where the meetings involve the discussion of the expenditure of state funds. 251.038 RSMo Supp 1973

Obviously 251.038 can't be carried out at the same time. 251.250 explicitly places no limits on members beyond requiring they be electors and residents. However, in situations like this the courts sometimes try to reconcile and apply both. This seems the reasonable approach here and would suggest the local units determine membership on regional planning commissions., subject to the naming of the appropriate state senators and representatives.

The language of 251.038 appears to make the senators and representatives voting members, not just ex-officio members when budget is considered, although special notice is mandated when the expenditure of state funds is under discussion.

251.038 specifies remuneration for the state senate and state representative members and the remaining committee members are taken care of in 251.260.

Expenses of regional commission members. — No compensation shall be paid members of regional planning commission provided that this shall not affect in any way remuneration received by any state or local official who, in addition to his responsibilities and duties as a state or local official, serves also as a member of the regional planning commission. All members may be reimbursed for actual expenses incurred as members of the commission in carrying out the work of the commission. 251.260 RSMo 1969

- Regional planning commission officer and meeting requirements:

Regional commission officers — meetings — records. — Each regional planning commission shall elect its own chairman and executive committee and shall establish its own rules of procedure, and may create and fill such other offices as it may determine necessary. The commission may authorize the executive committee to act for it on all matters pursuant to rules adopted by it. The commission shall meet at least once each year. It shall keep a record of its resolutions, transactions, findings, and determinations, which shall be a public record. 251.270

RSMo 1969

- Authority for regional planning commissions to appoint advisory groups. 251.290 RSMo 1969
- Limitation on powers of regional planning commission:

Regional commission, powers and duties — functions advisory only. — The regional planning commission may conduct all types of research studies, collect and analyze data, prepare maps, charts and tables, and conduct all necessary studies for the accomplishment of its other duties; it may make plans for the physical, social and economic development of the region, and may adopt by resolution any plan or the portion of any plan so prepared as its official recommendation for the development of the region; it may publicize and advertise its purposes, objectives and findings and may distribute reports thereon; it may provide advisory services on regional planning problems to the local government units within the region and to the other public and private agencies in matters relative to its functions and objectives, and may act as a coordinating agency for programs and activities of such local units and agencies as they relate to its objectives.

All public officials shall, upon request, furnish to the regional planning commission, within a reasonable time, such available information as it requires for its work. In general, the regional planning commission shall have all powers necessary to enable it to perform its functions and promote regional planning. The functions of the regional planning commission shall be solely advisory to the local governments and local government officials comprising the region. 251.300

RSMo 1969

- Procedural rules for planning by regional planning commissions:

In 251.310 through 251.420 and in 251.032 through 251.036, procedural rules for annual reports, plan approval, hearings and fiscal matters are set forth.

Provision is made to allow appropriation of state funds to help finance regional planning commissions, but distribution is to be "on matching basis of one-half state funds for one-half local funds." 251.034 RSMo Supp 1973. This means, of course, local funding is necessary before state funding is possible.

- How local units of government may withdraw from a regional planning commission:

"A local unit may withdraw from a regional planning commission at the end of any fiscal year by a two-thirds vote of the members of the governing body," 251.430 RSMo 1969. Apparently this is the only time withdrawal is now permitted. There was another withdrawal rule authorized for within the first ninety days after the governor created a regional planning commission, but that time is long past for all Missouri regional planning commissions.

- Procedure to dissolve a regional planning commission:

Dissolution of regional commission, procedure. — Upon receipt of certified copies of resolutions recommending the dissolution of a regional planning commission adopted by the governing bodies of a majority of the local units in the region, including the county court of any county, part or all of which is within the region, and upon a finding that all outstanding indebtedness of the commission has been paid and all unexpended funds returned to the local units which supplied them, or that adequate provision has been made therefor, the governor shall issue a certificate of dissolution of the commission which shall thereupon cease to exist. 251.440 RSMo 1969

APPENDIX B:

Pulaski County versus Missouri Data³⁴

	Pulaski	State
Population, 2000	41,165	5,595,211
Population, percent change, 1990 to 2000	-0.3%	9.3%
Persons under 5 years old, percent, 2000	7.7%	6.6%
Persons under 18 years old, percent, 2000	27.5%	25.5%
Persons 65 years old and over, percent, 2000	7.9%	13.5%
White persons, percent, 2000 (a)	78.4%	84.9%
Black or African American persons, percent, 2000 (a)	12.0%	11.2%
American Indian and Alaska Native persons, percent, 2000 (a)	1.0%	0.4%
Asian persons, percent, 2000 (a)	2.3%	1.1%
Native Hawaiian and Other Pacific Islander, percent, 2000 (a)	0.3%	0.1%
Persons reporting some other race, percent, 2000 (a)	2.5%	0.8%
Persons reporting two or more races, percent, 2000	3.6%	1.5%
Female persons, percent, 2000	47.2%	51.4%
Persons of Hispanic or Latino origin, percent, 2000 (b)	5.8%	2.1%
White persons, not of Hispanic/Latino origin, percent, 2000	75.8%	83.8%
High school graduates, persons 25 years and over, 1990	17,548	2,433,211
College graduates, persons 25 years and over, 1990	2,852	585,761
Housing units, 2000	15,408	2,442,017
Homeownership rate, 2000	58.1%	70.3%
Households, 2000	13,433	2,194,594
Persons per household, 2000	2.68	2.48
Households with persons under 18, percent, 2000	44.9%	34.7%
Median household money income, 1997 model-based estimate	\$31,701	\$34,502
Persons below poverty, percent, 1997 model-based estimate	14.3%	12.2%
Children below poverty, percent, 1997 model-based estimate	16.6%	17.7%

Business Facts

	Pulaski County	Missouri
Private nonfarm establishments, 1999	680	144,874
Private nonfarm employment, 1999	5,692	2,350,965
Private nonfarm employment, percent change 1990-1999	-4.5%	16.8%
Nonemployer establishments, 1998	1,634	302,681
Manufacturers shipments, 1997 (\$1000)	36,444	93,115,478
Retail sales, 1997 (\$1000)	178,798	51,269,881
Retail sales per capita, 1997	\$4,723	\$9,482
Minority-owned firms, percent of total, 1997	7.0%	6.5%
Women-owned firms, percent of total, 1997	16.7%	25.2%
Housing units authorized by building permits, 2000	7	24,321
Federal funds and grants, 2000 (\$1000)	650,013	35,687,402
Local government employment - full-time equivalent, 1997	1,413	201,609

Geography Facts	Pulaski County	Missouri
Land area, 2000 (square miles)	547	68.886

³⁴ Source U.S. Census Bureau: State and County QuickFacts. Data derived from Population Estimates, 2000 Census of Population and Housing, 1990 Census of Population and Housing, Small Area Income and Poverty Estimates, County Business Patterns, 1997 Economic Census, Minority- and Women-Owned Business, Building Permits, Consolidated Federal Funds Report, 1997 Census of Governments.

Persons per square mile, 2000	75.3	81.2
Metropolitan Area	None	

Pulaski County Income and Poverty Profile³⁵

Item		Year	Number	%	
Poor Persons (Total)		1989-90	5,222	14.8%	
		1995-96	5,355	15.7%	
		1997-98	4,956	14.3%	
Poor aged 5-17		1989-90	1,327	16.7%	
		1995-96	1,533	19.0%	
		1997-98	1,385	16.8%	
Median Household Income		1989-90	\$21,559	81.8 SX	
		1995-96	\$27,028	85.3 SX	
		1997-98	\$31,701	91.9 SX	
Year	Per Capita Income	% Change from Prev. Yr	PCI State Index	Pop Est	% Change from Prev. Yr
1990	\$14,254	-0.2	80.3	41,768	4.5
1991	\$15,260	7.1	82.2	41,855	0.2
1992	\$15,998	4.8	81.9	43,637	4.3
1993	\$16,442	2.8	81.0	40,124	-8.1
1994	\$16,479	0.2	77.5	39,360	-1.9
1995	\$17,702	7.4	80.1	37,777	-4.0
1996	\$20,464	15.6	88.6	37,198	-1.5
1997	\$21,243	3.8	87.2	37,859	1.8
1998	\$20,369	-4.1	81.0	39,331	3.9

³⁵ Source U.S. Census Bureau: State and County QuickFacts. Data derived from Population Estimates, 2000 Census of Population and Housing, 1990 Census of Population and Housing, Small Area Income and Poverty Estimates, County Business Patterns, 1997 Economic Census, Minority- and Women-Owned Business, Building Permits, Consolidated Federal Funds Report, 1997 Census of Governments.

Pulaski County Regional Economic Profile:³⁶

DESCRIPTION	1990	% OF TOTAL	1999	% OF TOTAL	CHANGE	PERCENT CHANGE	CHANGE IN % OF TOTAL
PERSONAL INCOME							
-Total personal income (\$000)	595,381	100.00	880,788	100.00	285,407	47.94	0.00
--Nonfarm personal income	595,876	100.08	883,618	100.32	287,742	48.29	0.24
--Farm income	-495	-0.08	-2,830	-0.32	-2,335	471.72	-0.24
DERIVATION OR PERSONAL INCOME							
-Net earnings 1/	473,397	79.51	647,712	73.54	174,315	36.82	-5.97
-Transfer payments	54,861	9.21	111,850	12.70	56,989	103.88	3.48
---Income maintenance 2/	5,897	0.99	11,766	1.34	5,869	99.53	0.35
---Unemployment insurance	2,274	0.38	2,087	0.24	-187	-8.22	-0.14
---Retirement & other	46,690	7.84	97,997	11.13	51,307	109.89	3.28
-Dividends, interest & rent	67,123	11.27	121,226	13.76	54,103	80.60	2.49
-Population (est). 3/	41,768		38,230		-3,538	-8.47	
PER CAPITA INCOMES (\$)							
-Per capita personal income	14,254		23,039		8,785	61.63	
-Per capita net earnings	11,334		16,943		5,609	49.49	
-Per capita transfer payments	1,313		2,926		1,613	122.85	
--Per capita income maintenance	141		308		167	118.44	
--Per capita unemployment insurance	54		55		1	1.85	

³⁶ Tables produced by Urban Information Center, UM-St. Louis;
SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis.

--Per capita retirement & other	1,118		2,563		1,445	129.25	
-Per capita dividends, interest & rent	1,607		3,171		1,564	97.32	
PLACE OF WORK PROFILE							
-Total earnings (place of work, \$000)	544,329	100.00	682,665	100.00	138,336	25.41	0.00
--Wages & salariess	381,190	70.03	474,757	69.54	93,567	24.55	-0.48
--Other labor income	138,364	25.42	169,663	24.85	31,299	22.62	-0.57
--Proprietors' income	24,775	4.55	38,245	5.60	13,470	54.37	1.05
---Nonfarm	25,611	4.71	41,533	6.08	15,922	62.17	1.38
---Farm	-836	-0.15	-3,288	-0.48	-2,452	293.30	-0.33
-Total employment (full & part-time)	23,790	100.00	23,224	100.00	-566	-2.38	0.00
--Wage & salary jobs	20,855	87.66	19,650	84.61	-1,205	-5.78	-3.05
--Number of proprietors	2,935	12.34	3,574	15.39	639	21.77	3.05
---Nonfarm 5/	2,388	10.04	2,966	12.77	578	24.20	2.73
---Farm	547	2.30	608	2.62	61	11.15	0.32
-Average earnings per job (\$)	22,881		29,395		6,514	28.47	
--Wage & salary earnings per job (\$)	18,278		24,161		5,883	32.19	
--Average earn per nonfarm proprietor(\$)	10,725		14,003		3,278	30.56	

Pulaski County Total Full-Time and Part-Time Employees by Major Industry:³⁷

DESCRIPTION	1990	% OF TOTAL	1999	% OF TOTAL	CHANGE	PERCENT CHANGE	CHANGE IN % OF TOTAL
EMPLOYMENT BY PLACE OF WORK							
Total full- & part- time employment	23,790	100.00	23,224	100.00	-566	-2.38	0.00
BY TYPE							
- Wage and salary employment	20,855	87.66	19,650	84.61	-1,205	-5.78	-3.05
- Proprietors' employment	2,935	12.34	3,574	15.39	639	21.77	3.05
--- Farm proprietors' employment	547	2.30	608	2.62	61	11.15	0.32
--- Nonfarm proprietors' employment 2/	2,388	10.04	2,966	12.77	578	24.20	2.73
BY INDUSTRY							
- Farm employment	584	2.45	624	2.69	40	6.85	0.23
- Nonfarm employment	23,206	97.55	22,600	97.31	-606	-2.61	-0.23
--- Private employment	8,753	36.79	9,571	41.21	818	9.35	4.42
----- Ag.serv.,for.,fish., and other 3/	80	0.34	110	0.47	30	37.50	0.14
----- Mining	10	0.04	33	0.14	23	230.00	0.10
----- Construction	527	2.22	894	3.85	367	69.64	1.63
----- Manufacturing	1,002	4.21	619	2.67	-383	-38.22	-1.55
----- Transportation and public utilitie	587	2.47	618	2.66	31	5.28	0.19
----- Wholesale trade	174	0.73	98	0.42	-76	-43.68	-0.31
----- Retail trace	2,685	11.29	2,912	12.54	227	8.45	1.25
----- Finance, insurance and real estate	600	2.52	811	3.49	211	35.17	0.97

³⁷ Missouri Secretary of State, Missouri State Library (2002).

----- Services	3,088	12.98	3,476	14.97	388	12.56	1.99
--- Government and government enterprise	14,453	60.75	13,029	56.10	-1,424	-9.85	-4.65
----- Federal, civilian	3,104	13.05	2,379	10.24	-725	-23.36	-2.80
----- Military	9,980	41.95	8,843	38.08	-1,137	-11.39	-3.87
----- State and local	1,369	5.75	1,807	7.78	438	31.99	2.03

Pulaski County Population Trend Report for Places 1990 – 2000:³⁸

Areaname	2000		1990		Change	
	Number	Percent	Number	Percent	Number	Percent
Pulaski County	41,165	100.0	41,307	100.0	-142	-0.3
Crocker city	1,033	2.5	1,077	2.6	-44	-4.1
Dixon city	1,570	3.8	1,585	3.8	-15	-0.9
Fort Leonard Wood CDP	13,666	33.2	15,863	38.4	-2197	-13.8
Richland city	1,618	3.9	1,879	4.5	-261	-13.9
St. Robert city	2,760	6.7	1,730	4.2	1030	59.5
Waynesville city	3,507	8.5	3,207	7.8	300	9.4
Places total	24,154	58.7	25,341	61.3	-1,187	-4.7
Balance of County	17,011	41.3	15,966	38.7	1,045	6.5

Pulaski County Demographic Profile, 2000 Census:⁴

Subject	Number	Pct
1. Total Population Trends		
2000	41,165	x
1990	41,307	x
Change, 1990-2000	-142	-0.3
2. Age		
Under 5 years	3.154	7.7

Subject	Number	Pct
5. Relationship of Persons in Households		
Total Persons in Households	35,956	x
Householder	13,433	32.6
Spouse	8,137	19.8
Child	12,009	29.2
Own Child under 18 years	10,470	25.4

³⁸ Missouri Secretary of State, Missouri State Library.

5 to 9 years	3,239	7.9
10 to 14 years	3,176	7.7
15 to 17 years	1,769	4.3
18 to 19 years	2,614	6.3
20 to 24 years	4,232	10.3
25 to 34 years	6,924	16.8
35 to 44 years	6,263	15.2
45 to 54 years	3,999	9.7
55 to 59 years	1,368	3.3
60 to 64 years	1,170	2.8
65 to 74 years	1,926	4.7
75 to 84 years	999	2.4
85 years and over	332	0.8
Median Age	28.5	x
17 and under	11,338	27.5
18 to 24 years	6,846	16.6
25 to 44 years	13,187	32.0
45 to 64 years	6,537	15.9
62 years and over	3,970	9.6
65 years and over	3,257	7.9
3. Race		
<i>One Race</i>	39,696	96.4
White	32,254	78.3
Black or African American	4,935	12.0
American Indian and Alaska Native	413	1.0
Asian	936	2.3
Native Hawaiian and Other Pacific Islander	130	0.3
Some other race	1,028	2.5
<i>Race alone or in combination with one or more other races:</i>		
White	33,459	81.3
Black or African American	5,355	13.0
American Indian and Alaska Native	825	2.0

Other relatives	1,051	2.6
Under 18 years	518	1.3
Non relatives	1,326	3.2
Unmarried Partner	520	1.3
6. Households by Type		
<i>Total Households</i>	13,433	x
Family households(families)	9,949	74.1
With own children under 18 years	5,683	42.3
Married Couple Family	8,137	60.6
with own children under 18 years	4,391	32.7
Female householder, no husband present	1,302	9.7
With own children under 18 years	939	7.0
Non Family Households	3,484	25.9
Householder living alone	2,907	21.6
Householder 65 years and over	967	7.2
Households with individuals under 18 years	6,033	44.9
Average Household size	2.7	x
Average Family Size	3.1	x
7. Group Quarters		
<i>Population in Group Quarters</i>	5,209	12.7
Institutionalized Population	280	0.7
Correctional Institutions	31	0.1
Nursing Homes	191	0.5
Noninstitutionalized Population	4,929	12.0
College Dormitories (includes college quarters off campus)	0	0.0
Military Quarters	4,897	11.9

Asian	1,365	3.3
Native Hawaiian and Other Pacific Islander	271	0.7
Some other race	1,480	3.6
<i>Multi Race</i>	1,469	3.6
4. Hispanic or Latino and Race		
<i>Hispanic or Latino (of any race)</i>	2,404	5.8
Mexican	1,106	2.7
Puerto Rican	584	1.4
Cuban	27	0.1
Other Hispanic or Latino	687	1.7
<i>Not Hispanic or Latino</i>	38,761	94.2
White alone	31,200	75.8

Other Non Institutional group quarters	32	0.1
8. Housing Occupancy and Tenure		
<i>Total Housing Units</i>	15,408	x
Occupied Housing Units	13,433	87.2
Owner Occupied	7,808	50.7
Renter Occupied	5,625	36.5
Vacant Housing Units	1,975	12.8
Vacant for Rent	560	3.6
Vacant for Sale	315	2.0
For Seasonal, Recreation or Occasional use	470	3.1
Homeowner Vacancy Rate	3.9	x
Rental Vacancy Rate	9.1	x
Average Household Size of owner-occupied units	2.6	x
Average Household Size of renter-occupied units	2.8	x

LIST OF REFERENCES

- Bates, Timothy, *Theories of Entrepreneurship from Theories of Local Economic Development*, Richard Bingham and Robert Mier, ed., Newbury Park: Sage, 1993.
- Bevins, Robert J., "Regional Planning in Missouri: The Legal Authorization." Columbia, Missouri: University of Missouri Department of Community Development, 1994.
- Blakely, Edward J., *The Local Economic Development Planning Process: Planning Local Economic Development, Theory and Practice*. Thousand Oaks, CA: Sage, 1994.
- Braddon, Derek, *Exploding the Myth? The Peace Dividend, Regions and Market Adjustment*. Australia, Canada, France: Hardwood Academic, 2000.
- Braschler, Curtis, John A. Croll and Bryan Phifer, "Economic Base Multipliers and Community Growth." Columbia, Missouri: University of Missouri Department of Community Development, 1993.
- Braschler, Curtis, John A. Croll, Bryan Phifer, and John Kuehn, "Understanding Your Community's Economic Base." Columbia, Missouri: University of Missouri Department of Community Development, 1994.
- Clark, Susan E. and Gary L. Gaile, *The Fourth Wave, Global-Local Links and Human Capital (The Work of Cities)*. Minneapolis, Minnesota: University of Minnesota Press, 1988.
- Commission of the European Communities, *The Economic and Social Impact of Reductions in Defence Spending and Military Forces on the Regions of the Community*. Luxembourg: Economists Advisory Group Limited in Conjunction with the Centre for Defence Economics, 1992.
- Cook, James B., "Community Development Theory." Columbia, Missouri: University of Missouri Department of Community Development, 1994.
- Darded, Michael, Kevin F. McCarghy, Jesse Malkin, and Georges Vernez, *The Effect of Military Base Closures on Local Communities, California Communities*. Rand: (<http://www.rand.org/publications>), Feb. 1996.
- Department of Labor and Department of Defense, Bureau of Labor Statistics, *Defense Economic Impact Modeling System (DEIMS)*, print outs of industrial detail forecast from, and various booklets on different aspects of, DEIMS, 2002.

Dumas, Lloyd J. and Marek Thee, ed., *Making Peace Possible: The Promise of Economic Conversion*. New York: Pergamon Press, 1989.

Dunne, J. P., *Quantifying the Relation of Defence Expenditure to Employment from Defence Expenditure, Industrial Conversion and Local Employment*, Liba Paukert and Peter Richards, ed. Geneva: International Labour Organisation, 1991.

Economist magazine, February 16th, 2002, p.26.

Feldman, Jonathan Michael, *Converting the Military Economy*, from *Making Peace Possible: The Promise of Economic Conversion*, Lloyd J. Dumas and Marek Thee, ed. New York: Pergamon Press, 1989.

Feldman, Jonathan Michael, *Survey Methodology for Measuring Defense Diversification Outcomes*, (Working Paper No. 126). New Brunswick, NJ: Center for Urban Policy Research, Rutgers University, 1997a.

Feldman, Jonathan Michael, *Diversification After the Cold War: Results of the National Defense Economy Survey*, (Working Paper No. 112). New Brunswick, NJ: Center for Urban Policy Research, 1997b.

Gabriel, Gerald, "Developing Effective Study Committees." University of Missouri-Columbia, 1993.

Gohrband, Christopher A., and Jeanne P. Gordus, *Defence Manufacturing Employment in Michigan: Possible Effects in Cuts in Procurement from Defence Expenditure, Industrial Conversion and Local Employment*, Liba Paukert and Peter Richards, ed. Geneva: International Labour Organisation, 1991.

Gra'Delle, Duncan, *Killeen: Tale of Two Cities: 1882 – 1992*. Killeen, Texas: Eakin Press, 1984.

Green, Roy E., ed., *Enterprise Zones: New Directions in Economic Development*. London: Sage Publications, 1991.

Greider, William, *Fortress America: The American Military and the Consequences of Peace*. New York: Public Affairs, 1998.

Harrison, Jeffery L., *Law and Economics*. St. Paul, Minnesota: West Group, 2000

Hendricks, Curtis, Charles M. St. Clair, and William Robertson, "The Elements of Economic Development." Columbia, Missouri: University of Missouri Department of Community Development, 1993.

Hill, Catherine, Sabina Deitrick, and Ann Markusen, *Converting the Military Industrial Economy: The Experience of Six Communities*, (Working Paper No. 24). New Brunswick, NJ: Center for Urban Policy Research, 1991.

Jacobs, Jane, *The Death and Life of Great American Cities*. NY: Random House, 1993.

- Leffler, John, (Bell County Historical Commission) *Story of Bell County, Texas* (2 vols). Killeen, Texas: Eakin Press, 1988.
- Lewis, Leslie, Zalmay M. Khalizad, and C. Robert Roll, *New Concept Development: A New Planning Approach for the 21st Century Air Force*. Santa Monica, CA: Rand (Project Air Force), 1997.
- List, Frederic, "A Plan for Small Group Discussion." Columbia, Missouri: University of Missouri-Columbia, 1994.
- Lyons, Thomas S. and Roger E. Hamlin, *Creating an Economic Development Action Plan: A Guide for Development Professionals*. Westport, Connecticut: Praeger, 2001
- Malizia, Emil E. and Edward J. Feser, *Economic Growth Versus Economic Development: Understanding Local Economic Development*. New Brunswick, NJ: Rutgers, 1999.
- Markusen, Ann, *Cold War Workers, Cold War Communities*, (Working Paper No. 69, presented to the Landmarks Conference on the Cold War and American Culture, March 17 – 19, 1994 at The American University), Piscataway, NJ: Center for Urban Policy Research: 1994.
- Markusen, Ann and Michael Oden, *Investing the Peace Dividend: A Conversion Policy that Works* (Working paper no. 88). Rutgers: Center for Urban Policy Research, 1995.
- Melman, Seymour, *Law for Economic Conversion: Necessity and Characteristics from Making Peace Possible: The Promise of Economic Conversion*, Dumas, Lloyd J. and Marek Thee, ed. New York: Pergamon Press, 1989.
- Missouri Secretary of State, Missouri State Library, The Missouri State Census Data Center Program, <http://osed.missouri.edu/MOSTATS/Missouri/Counties/Beapro.>, Feb 2002.
- Oden, Michael, Elizabeth J. Mueller, and Judy Goldberg, *Life After Defense: Conversion and Economic Adjustment on Long Island* (Working Paper No. 82). Piscataway, NJ: Center for Urban Policy Research, 1994.
- Office of Management and Budget, *Communities in Transition - Community Response to Reduced Defense Activity*. OMB Circular Nos. A-128, and A-87, and 32 CFR Parts 25, 28 and 33.
- Overby, Mary Margaret, "The Social Impact of Naval Base Development on a Coastal Community: Camden County, Georgia." University of Florida: 1982.
- Paukert, Liba and Peter Richards, ed., *Defence Expenditure, Industrial Conversion and Local Employment*. Geneva: International Labour Organisation, 1991.
- Pearce, Douglas, *Planning for Tourism*. New York: John Wiley and Sons, 1992.
- Peattie, Lisa R., *Economic Conversion as a Set of Organizing Ideas from Making Peace Possible Making Peace Possible: The Promise of Economic Conversion*, Lloyd J. Dumas, Lloyd J. and Marek Thee, ed. New York: Pergamon Press, 1989.

Renner, Michael, *Swords into Plowshares: Converting to a Peace Economy*.
Worldwatch Paper 96: Worldwatch Institute, 1990.

Ricardo, David, *The Principles of Political Economy and Taxation*. London: J.M. Dent & Sons, 1973; original edition 1817.

Rice, Mark P and Jana B. Matthews, *Growing New Ventures, Creating New Jobs*
(Principles and Practices of Successful Business Incubation and Beyond Incubators:
Emerging Trends and Strategies for Business Incubation). Westport, Connecticut:
Quorum, 1995.

Simon, Jay and Curtis Braschler, John A. Kuehn, and John Croll, "Potential for Retail
Trades in Rural Communities." Columbia, Missouri: U. of Missouri Department of
Community Development, 1993.

Snell, Ronald, *A Review of State Economic Development Policy*. Washington, D.C:
National Conference on State Legislators, 1998.

The President's Economic Adjustment Committee (SECDEF, Chairman, *Communities in
Transition: Community Response to Reduced Defense Activity*. Washington, D.C:
Defense Office of Economic Adjustment, 1977.

Urban Information Center, UM-St. Louis (source: U.S. Department of Commerce,
Bureau of Economic Analysis), Feb, 2002.

U. S. Congress, Office of Technology Assessment, "After the Cold War: Living With
Lower Defense Spending," (OTA-ITE). Washington, D.C: U.S. GPO, Feb, 1992.

Internet Sites

Armed Forces News, LLC, February 2002, <http://www.armedforcesnews.com>.

Boston Herald, February 2002, <http://www.bostonherald.com/news/opinions/edito81>.

Catalog of Federal Domestic Assistance (CFDA), Jan 2002, <http://www.cfda.gov/public>.

Center for Defense Information, Jan 2002, <http://www.edi.org/issues/milspend.html>.

Chapman, Gary, In Context: Military Spending and the American Economy, Feb 2002,
<http://www.context.org>.

Cohen Analysis Paper, Jan 2002, <http://www.federalserve.gov>.

Community Job Fair, Dec 2001, <http://workforcelink.com/html/jobfair>.

Economic Development Administration, Investing in Defense Impacted Communities, Jan 2002
<http://www.aiea.valr.edu/eda/investing>, U.S. Department of Commerce.

Federal Outlays, <http://economic.about.com> (Jan 2002)

Flanigan, James, LA Times.com, Tech Industry, Sep. 30, 2001,
<http://www.latimes.com/technology>.

Fort Hood: <http://www.hood.army.mil> (Jan 2002)

FY03 Military Budget, Feb 2002, <http://www.edi.org>.

GKCC Statistics, Mar 2002, <http://www.gkcc.com/statistics.htm> .

Missouri Department of Economic Development, Missouri Economic Research and
Information Center (MERIC), Feb 2002, <http://www.ecodev.state.mo.us/research/>.

Monthly Labor Review online, exerpt from Jul 1998, vol 121, no. 7, <http://stats.bls.gov>

NAID, Feb 2002, <http://www.naid.org/#round>.

Office of Economic Adjustment, Department of Defense, "Defense Assistance: Making a
Difference" Feb 2002, <http://emissary.acq.osd.mil/oea.home.nsf/>.

Personnel Reports (SIAD), Feb 2002, <http://web1.whs.osd.mil/mmids/mmidshome.htm>.

Project on Defense Alternatives, Feb 2002, <http://www.comw.org/pda/wanting.html>.

The Handbook of Texas online, <http://www.tsha.utexas.edu/handbook/online/articles>

Texas Overview, Texas Economic Development: Marketing the Lone Star State, Feb 2002,
<http://www.tded.state.tx.us/>.

The Need Now is as Great as Ever, Mar 2002, <http://www.webcam.com/ncecd/econ/html>.

Tour Pulaski County, Feb 2002, www.wood.army.mil.RCGA.pcprofil.htm.

U.S. Department of Commerce, EDA, Defense Conversion, <http://www.doc.gov.eda/html>

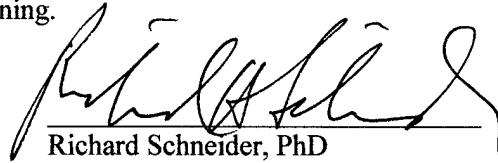
U.S. Census Bureau, State and County QuickFacts, Feb 2002.

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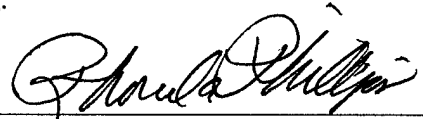
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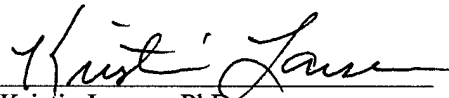
Richard Schneider, PhD
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I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a thesis for the degree of Master of Arts in Urban and Regional Planning.



Rhonda Phillips, PhD
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